

SHARP SERVICE MANUAL

No. S0080CDMD300H

AUDIO TOWER SYSTEM

MODEL CD-MD3000H

CD-MD3000H Audio Tower System consisting of CD-MD3000H (main unit) and CP-RW5000H (speaker system).

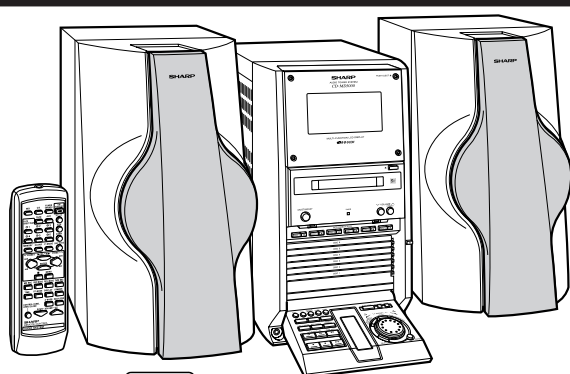


Illustration: CD-MD3000H

AUDIO TOWER SYSTEM

MODEL CD-MD3000W

CD-MD3000W Audio Tower System consisting of CD-MD3000W (main unit) and CP-RW5000W (speaker system).

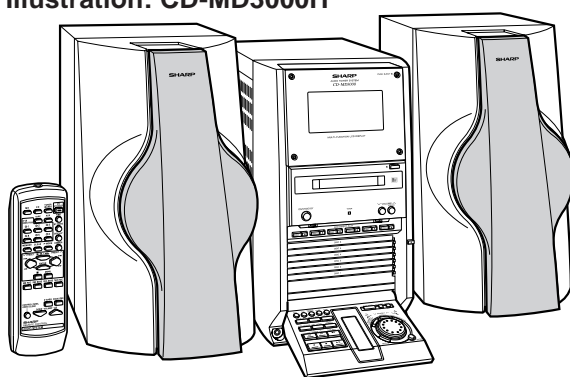


Illustration: CD-MD3000W

• In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified should be used.

• **Note for users in U.K.**

Recording and playback of any material may require consent which SHARP is unable to give. Please refer particularly to the provisions of Copyright Act 1956, the Dramatic and Musical Performers Protection Act 1956, the Performers Protection Acts 1963 and 1972 and to any subsequent statutory enactments and orders.

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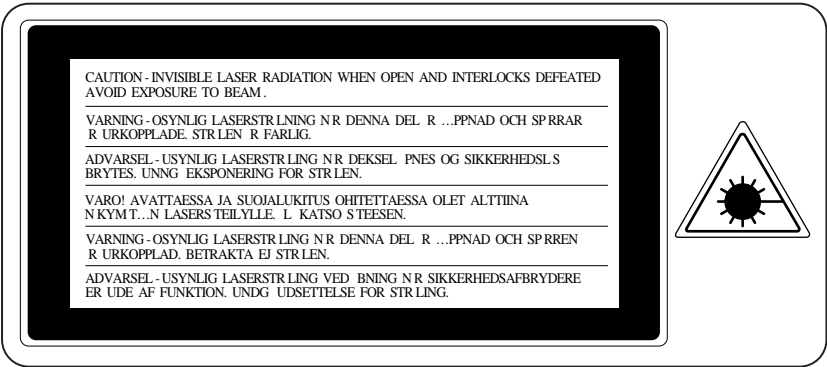
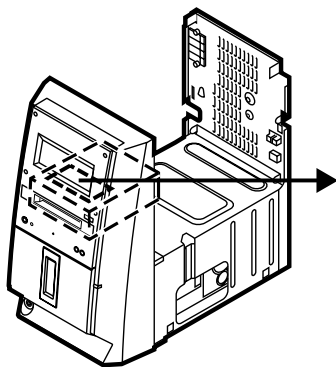
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SAFETY PRECAUTION OF MD SECTION FOR SERVICE MANUAL

WARNINGS

The AEL (ACCESSIBLE EMISSION LEVEL) of the laser power output is less than class 1 but the laser component is capable of emitting radiation exceeding the limit for class 1. Therefore it is important that the following precautions are observed during servicing to protect your eyes against exposure to the laser beam.

- 1) When the unit case cover is removed and LOADING SW (SW 1956) is turned on and then PLAY SW (SW 1954 mechanism PWB) is turned on in a few second.
The laser will light for several second to detect a disk.
- 2) The laser power output of the pickup unit and replacement service parts are all factory pre-set before shipment.
Do not attempt to re-adjust the laser pickup unit during replacement or servicing.
- 3) Under no circumstances stare into the pickup lens at any time.
- 4) If laser optical unit becomes faulty, replace the complete laser optical unit.
- 5) CAUTION-USE of controls or adjustments, or performance of procedures other than those specified herein may result in hazardous radiation exposure.



Laser Diode Properties

- Material: GaAlAs
- Wavelength: 785 nm
- Pulse time:

Read mode: 0.8 mW Continuous
Write mode: max 10 mW 0.5S
min cycle 1.5S
Repetition

VAROITUS! LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAI
NITULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1
YLITÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

WARNING - OM APPARATEN ANVÄNDS PÅ ANNAT SÄTT ÄN I DENNA BRUKSANVISNI
NG SPECIFICERAS. KAN ANVÄNDAREN UTSÄTTAS FÖR OSYNLIG LASERSTRÅLNING,
SOM ÖVERSKRIDER GRÄNSEN FÖR LASERKLASS 1.

VARO ! Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.
VARNING! Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Beträkta ej strålen.

Precaution to be taken when replacing and servicing the laser pickup.
The following precautions must be observed during servicing to protect your eyes against exposure to the laser.
Warning of possible eye damage when repairing:
If the AC power plug is connected when the inner cover of the unit is removed, the laser will light up during focus access (about 1 second) (Fig. 2-1).
During this operation, the laser will leak from the opening between the magnetic head and cartridge holder (Fig. 2-2).
In order to protect your eyes, you must not look at the laser during repair.
Before repairing, be sure to disconnect the AC power plug.

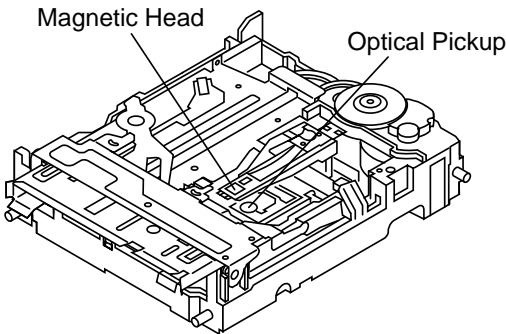


Figure 2-1

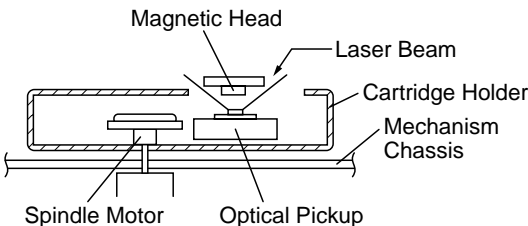


Figure 2-2

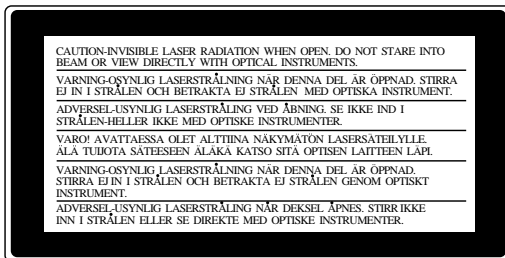
SAFETY PRECAUTION OF CD SECTION FOR SERVICE MANUAL (FOR CD-MD3000H)

WARNINGS

Precaution to be taken when replacing and servicing the Laser Pickup.

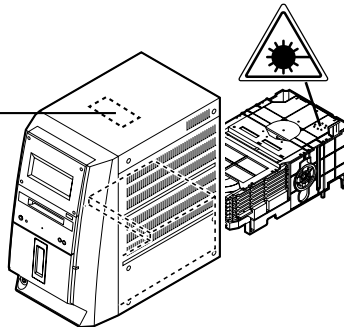
The AEL (Accessible Emission Level) of Laser Power Output for this model is specified to be lower than Class 1 Requirements. However, the following precautions must be observed during servicing to protect your eyes against exposure to the Laser beam.

- (1) When the cabinet has been removed, the power is turned on without a compact disc, and the Pickup is on a position outer than the lead-in position, the Laser will light for several seconds to detect a disc. Do not look into the Pickup Lens.
- (2) The Laser Power Output of the Pickup inside the unit and replacement service parts have already been adjusted prior to shipping.
- (3) No adjustment to the Laser Power should be attempted when replacing or servicing the Pickup.
- (4) Under no circumstances look directly into the Pickup Lens at any time.
- (5) CAUTION - Use of controls or adjustments, or performance of procedures other than those specified herein may result in hazardous radiation exposure.

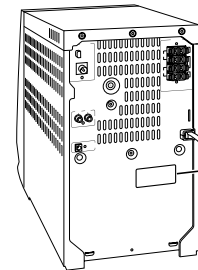


VAROITUS! LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTÖMÄLLE LASERSÄTEILYLLE.

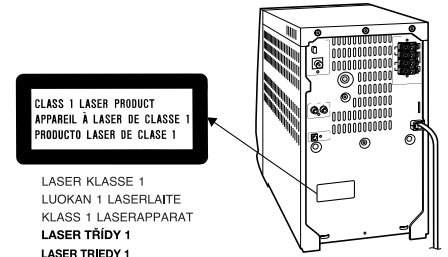
WARNING - OM APPARATEN ANVÄNDS PÅ ANNAT SÄTT ÄN I DENNA BRUKSANVISNING SPECIFICERAS. KAN ANVÄNDAREN UTSÄTTS FÖR ÖSYNLIG LASERSTRÅLNING, SOM ÖVERSKRIDER GRÄNSEN FÖR LASERKLASS 1.



Laser Diode Properties
Material: GaAlAs
Wavelength: 780 nm
Emission Duration: continuous
Laser Output: max. 0.6 mW



(For U.K.)



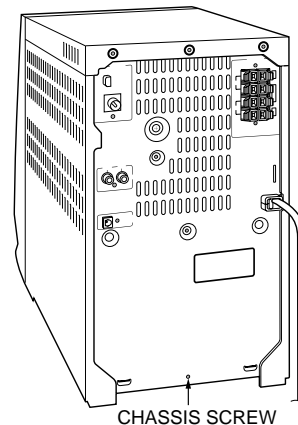
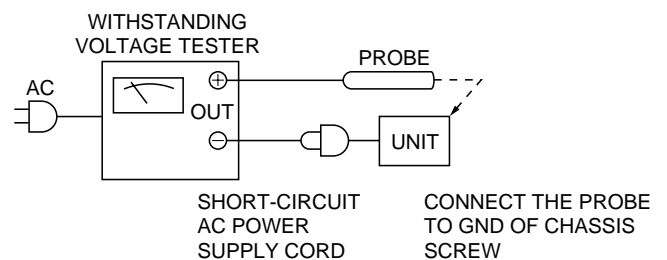
(Except for U.K.)

IMPORTANT SERVICE NOTES (CD-MD3000H FOR U.K. ONLY)

Before returning the unit to the customer after completion of a repair or adjustment it is necessary for the following withstand voltage test to be applied to ensure the unit is safe for the customer to use.

Setting of Withstanding Voltage Tester and set.

Set name	set value
Withstanding Voltage Tester	
Test voltage	4,240 VPEAK 3,000 VRMS
Set time	6 secs
Set current (Cutoff current)	4 mA
Unit	
Judgment	
OK: The "GOOD" lamp lights.	
NG: The "NG" lamp lights and the buzzer sounds.	



SAFETY PRECAUTION OF CD SECTION FOR SERVICE MANUAL (FOR CD-MD3000W)

WARNINGS

Precaution to be taken when replacing and servicing the Laser Pickup.

The AEL (Accessible Emission Level) of Laser Power Output for this model is specified to be lower than Class 1 Requirements. However, the following precautions must be observed during servicing to protect your eyes against exposure to the Laser beam.

- (1) When the cabinet has been removed, the power is turned on without a compact disc, and the Pickup is on a position outer than the lead-in position, the Laser will light for several seconds to detect a disc. Do not look into the Pickup Lens.
- (2) The Laser Power Output of the Pickup inside the unit and replacement service parts have already been adjusted prior to shipping.
- (3) No adjustment to the Laser Power should be attempted when replacing or servicing the Pickup.
- (4) Under no circumstances look directly into the Pickup Lens at any time.
- (5) CAUTION - Use of controls or adjustments, or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION

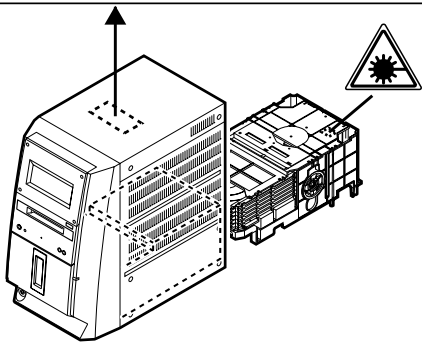
CLASS 1 LASER PRODUCT
APPAREIL À LASER DE CLASSE 1
PRODUCTO LASER DE CLASE 1

- This Audio Tower System is classified as a CLASS 1 LASER product.
- The CLASS 1 LASER PRODUCT label is located on the rear cover.
- Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

As the laser beam used in this compact disc player is harmful to the eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

Laser Diode Properties
Material: GaAlAs
Wavelength: 780 nm
Emission Duration: continuous
Laser Output: max. 0.6 mW

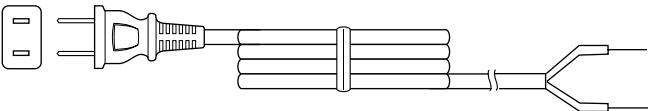
CAUTION-INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.
VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRÄKTA EJ STRÅLEN MED OPTISKA INSTRUMENT.
ADVERSEL-USYNLIG LASERSTRÅLNING VED ÅBNING. SE IKKE IND I STRÅLEN-HELLER IKKE MED OPTISKE INSTRUMENTER.
VARO! AVATTAESSA OLET ALTIINNA NÄKYMÄTÖN LASERSÄTELYLLE. ÄLÄ TUDOTA SÄTEESEEN ALAKA KATSO SITÄ OPTISEN LAITTEEN LÄPI.
VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRÄKTA EJ STRÅLEN GENOM OPTISKT INSTRUMENT.
ADVERSEL-USYNLIG LASERSTRÅLNING NÄR DEKSEL ÅPNES. STIRR IKKE INN I STRÅLEN ELLER SE DIREKTE MED OPTISKE INSTRUMENTER.



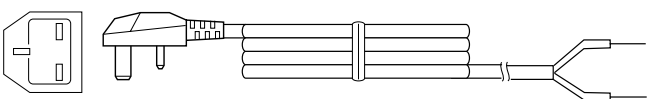
VOLTAGE SELECTION (FOR CD-MD3000W ONLY)

Before operating the unit on mains, check the preset voltage. If the voltage is different from your local voltage, adjust the voltage as follows. Turn the selector with a screwdriver until the appropriate voltage number appears in the window (110 V, 127 V, 220 V or 230 V - 240 V AC).

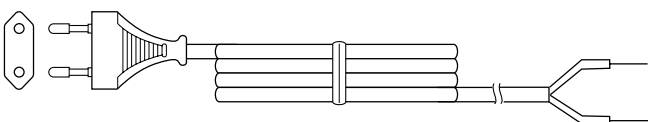
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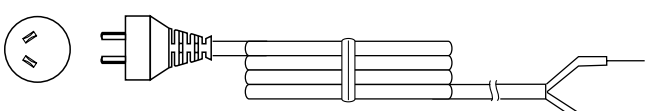
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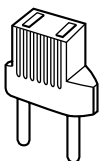
QACCE0008AW00



QACCL0005AW00



QPLGA0003AWZZ



QPLGA0004AWZZ



Figure 4 AC POWER SUPPLY CORD AND PLUG ADAPTOR

FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

SPECIFICATIONS

CD-MD3000H/CD-MD3000W

■ General (CD-MD3000H)

Power source	AC 230 V, 50 Hz
Power consumption	Power on: 180 W Power stand-by: 0.6 W (*)
Dimensions	Width: 200 mm (7-7/8") Height: 352 mm (13-7/8") Depth: 377 mm (14-7/8")
Weight	10.3 kg (22.7 lbs.)

(*) This power consumption value is obtained when the demonstration mode is cancelled in the power stand-by mode.

■ General (CD-MD3000W)

Power source	AC 110/127/220/230 - 240 V, 50/60 Hz
Power consumption	180 W
Dimensions	Width: 200 mm (7-7/8") Height: 352 mm (13-7/8") Depth: 377 mm (14-7/8")
Weight	10.9 kg (24.0 lbs.)

■ Amplifier (CD-MD3000H for U.K.)

Output power	RMS: 200 W (100 W + 100 W) (10 % T.H.D.) Main speaker (woofer and tweeter): 80 W (40 W + 40 W) Subwoofer: 120 W (60 W + 60 W) RMS: 184 W (92 W + 92 W) (0.9 % T.H.D.) Main speaker (woofer and tweeter): 74 W (37 W + 37 W) Subwoofer: 110 W (55 W + 55 W)
Output terminals	Speakers: 6 ohms Headphones: 16-50 ohms (recommended; 32 ohms)
Input terminals	Auxiliary: 500 mV/47 kohms Digital input (optical)

■ Amplifier (CD-MD3000H except for U.K.)

Output power	PMPO: 668 W MPO: 334 W (167 W + 167 W) (DIN 45 324) Main speaker (woofer and tweeter): 134 W (67 W + 67 W) Subwoofer: 200 W (100 W + 100 W) RMS: 200 W (100 W + 100 W) (DIN 45 324) Main speaker (woofer and tweeter): 80 W (40 W + 40 W) Subwoofer: 120 W (60 W + 60 W) RMS: 184 W (92 W + 92 W) (DIN 45 500) Main speaker (woofer and tweeter): 74 W (37 W + 37 W) Subwoofer: 110 W (55 W + 55 W)
Output terminals	Speakers: 6 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms)
Input terminals	Auxiliary: 500 mV/47 kohms Digital input (optical)

■ Amplifier (CD-MD3000W)

Output power	MPO: 334 W (167 W + 167 W) (10 % T.H.D.) Main speaker (woofer and tweeter): 134 W (67 W + 67 W) Subwoofer: 200 W (100 W + 100 W) RMS: 200 W (100 W + 100 W) (10 % T.H.D.) Main speaker (woofer and tweeter): 80 W (40 W + 40 W) Subwoofer: 120 W (60 W + 60 W) RMS: 184 W (92 W + 92 W) (0.9 % T.H.D.) Main speaker (woofer and tweeter): 74 W (37 W + 37 W) Subwoofer: 110 W (55 W + 55 W)
Output terminals	Speakers: 6 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms)
Input terminals	Auxiliary: 500 mV/47 kohms Digital input (optical)

■ CD player

Type	6-disc multi-play compact disc changer player
Signal readout	Non-contact, 3-beam semiconductor laser pickup
D/A converter	1-bit D/A converter
Frequency response	20 - 20,000 Hz
Dynamic range	90 dB (1 kHz)

■ MiniDisc

Type	MiniDisc recorder
Signal readout	Non-contact, 3-beam semiconductor laser pickup
Rotation speed	400 - 900 rpm CLV, Approx.
Error correction	ACIRC (Advanced Cross Interleave Reed-Solomon Code)
Quantization	20-bit linear (A/D converter)
Coding	ATRAC (Adaptive Transform Acoustic Coding)
Sampling frequency	44.1 kHz
Recording method	Magnetic modulation overwrite method
Frequency response	20 - 20,000 Hz
D/A converter	1-bit D/A converter
Wow and flutter	Unmeasurable (less than 0.001% W. peak)
Signal/noise ratio	95 dB (1 kHz)
Dynamic range	90 dB (1 kHz)
Audio channel	Stereo: 2 channels Monaural: 1 channel (playback only) (long-time recording mode)

■ Cassette deck (CD-MD3000H for U.K./CD-MD3000W)

Frequency response	50 - 14,000 Hz (Normal tape)
Signal/noise ratio	50 dB (recording/playback)
Wow and flutter	0.3 % (WRMS)

■ Cassette deck (CD-MD3000H except for U.K.)

Frequency response	50 - 14,000 Hz (Normal tape)
Signal/noise ratio	50 dB (recording/playback)
Wow and flutter	0.3 % (DIN 45 511)

■ Tuner (CD-MD3000H for U.K.)

Frequency range	FM: 87.50 -108.00 MHz AM: 522 - 1,620 kHz
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■ Tuner (CD-MD3000H except for U.K.)

Frequency range	FM: 87.5 -108 MHz AM: 522 -1,620 kHz
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■ Tuner (CD-MD3000W)

Frequency range	FM: 88 -108 MHz AM: 531 -1,602 kHz
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CP-RW5000H/CP-RW5000W

Type	3-way type speaker system 5 cm (2") Tweeter 13 cm (5-1/4") Woofer 13 cm (5-1/4") Subwoofer
Maximum input power (Total)	200 W
Rated input power (Total)	100 W
Impedance	6 ohms
Dimensions	Width: 210 mm (8-1/4") Height: 392 mm (15-7/16") Depth: 345 mm (13-9/16")
Weight	5.1 kg (11.2 lbs.)/each

Specifications for this model are subject to change without prior notice.

NAMES OF PARTS

CD-MD3000H/CD-MD3000W

■ Front panel

1. Cassette Compartment
2. Volume Up/Demo Button
3. Volume Down Button
4. Timer Set Indicator
5. On/Stand-by Button
6. CD Direct Play Buttons (with Indicator)/
CD Eject Buttons
7. Disc Trays
8. Headphone Socket
9. MD Eject Button
10. MD Compartment
11. Control Panel Open/Close Button

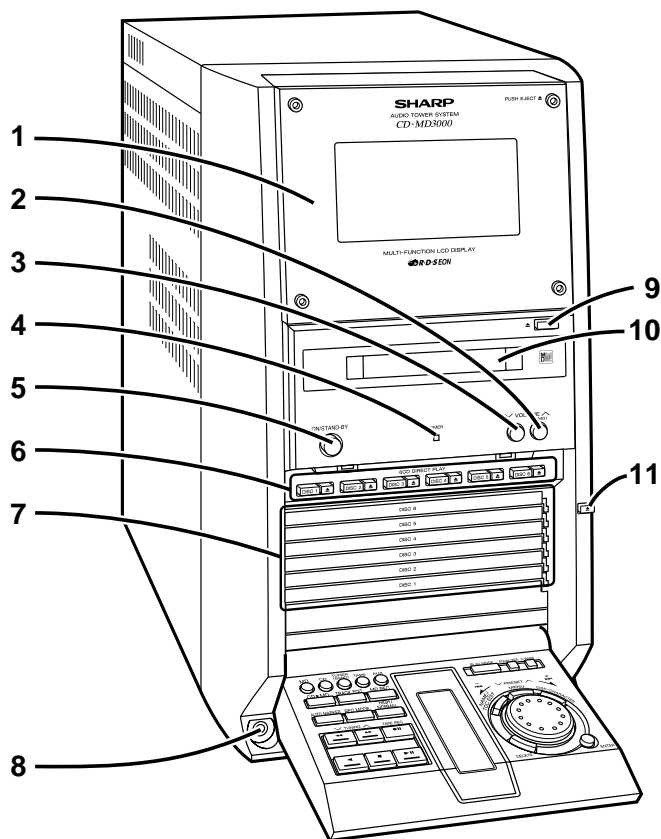
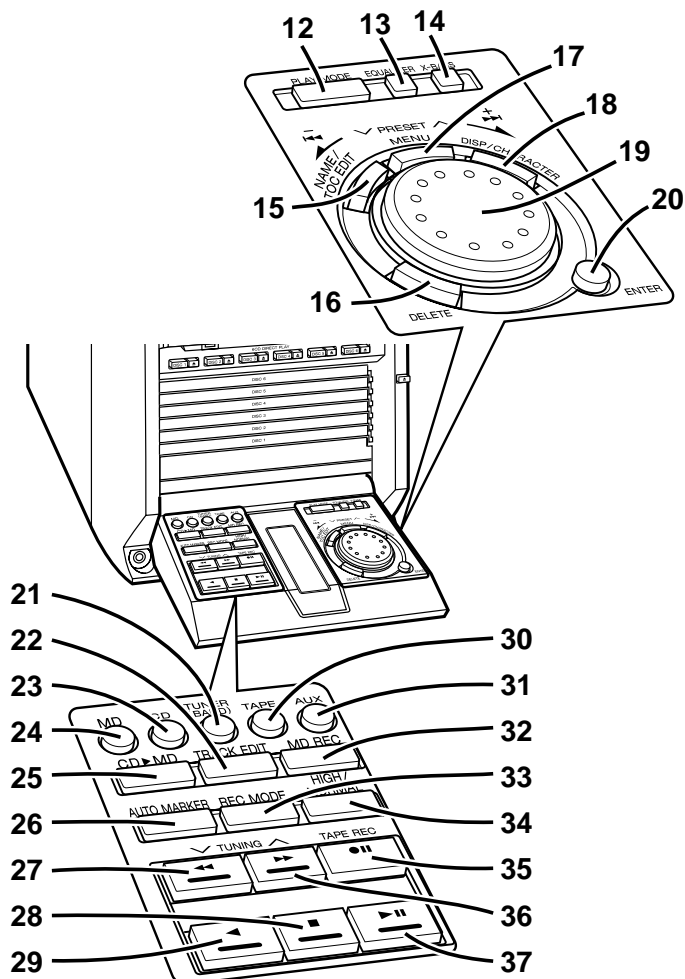


Illustration: CD-MD3000H

■ Control panel

12. CD/MD Play Mode Select Button
13. Equalizer Mode Select Button
14. Extra Bass Button
15. Name/Toc Edit Button
16. Delete Button
17. Menu Button
18. Display/Character Button
19. Jog Dial
20. Enter Button
21. Tuner (Band) Button
22. MD Track Edit Button
23. CD Button
24. MD Button
25. CD ▶ MD One Touch Edit Button
26. MD Auto Mark Select Button
27. CD/MD Fast Reverse, Tape Fast Wind or
Tuning Down Button (with Indicator)
28. Stop Button (with Indicator)
29. Tape Reverse Play Button (with Indicator)
30. Tape Button
31. Auxiliary Button
32. MD Record Button
33. MD Record Mode Button
34. MD Record Speed Select Button
35. Tape Record Pause Button
36. CD/MD Fast Forward, Tape Fast Wind or
Tuning Up Button (with Indicator)
37. CD/MD Play or Pause, Tape Forward Play Button
(with Indicator)



Multi-function LCD display

1. CD Indicators
2. Function Indicator
3. Extra Bass Indicator
4. Timer Play Indicator
5. Sleep Indicator
6. Timer Recording Indicator
7. CD/MD Play Indicator
8. CD/MD Repeat Indicator
9. CD/MD Pause Indicator
10. FM Stereo Indicator
11. Tape Reverse Mode Indicator
12. FM Stereo Mode Indicator
13. Cassette Indicator
14. Level Meter
15. MD Indicator
16. Digital Source Indicator
17. Monaural Long-Play Mode Indicator
18. Disc Name Indicator
19. Auto Mark Indicator
20. Memory Indicator
21. Total Indicator
22. Track Name Indicator
23. Track Edit Indicator
24. Random Play Indicator
25. CD All Disc Play Indicator
26. Remain Indicator
27. Record Indicator
28. RDS Indicator (CD-MD3000H Only)
29. Radio Text Indicator (CD-MD3000H Only)
30. Clock Time Indicator (CD-MD3000H Only)
31. Dynamic PTY Indicator (CD-MD3000H Only)
32. Traffic Programme Indicator (CD-MD3000H Only)
33. TOC Indicator
34. Synchronised Recording Indicator
35. EON Indicator (CD-MD3000H Only)
36. Traffic Information Indicator (CD-MD3000H Only)
37. Programme Type Indicator (CD-MD3000H Only)
38. Traffic Announcement Indicator (CD-MD3000H Only)

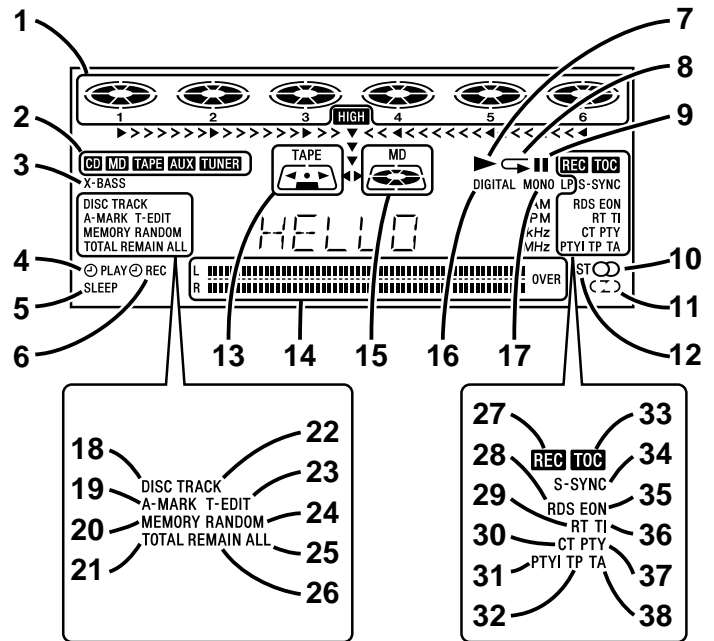
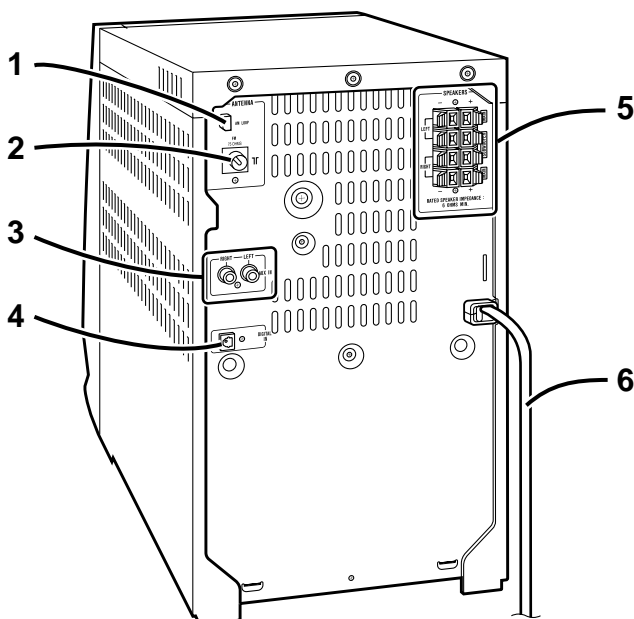


Illustration: CD-MD3000H

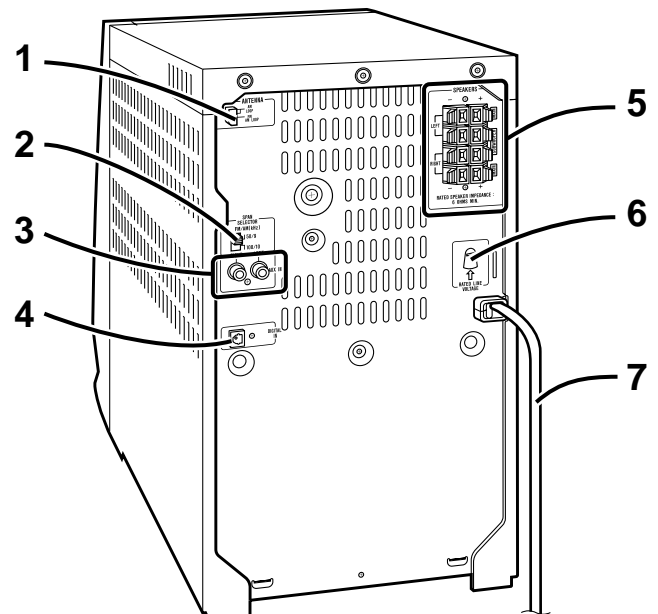
Rear panel (CD-MD3000H)

1. AM Loop Aerial Socket
2. FM 75 Ohms Aerial Socket
3. Auxiliary Input Sockets
4. Digital Input Socket
5. Speaker Terminals
6. AC Power Lead



Rear panel (CD-MD3000W)

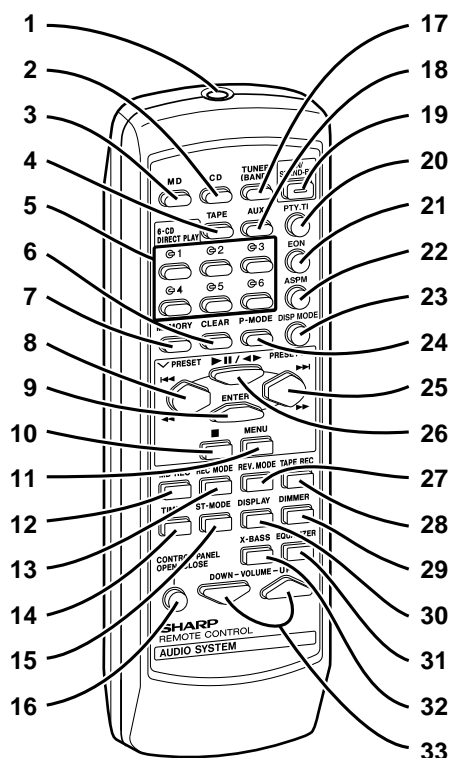
1. FM/AM Loop Aerial Socket
2. Span Selector Switch
3. Auxiliary Input Sockets
4. Digital Input Socket
5. Speaker Terminals
6. AC Voltage Selector
7. AC Power Lead



CD-MD3000H/CD-MD3000W

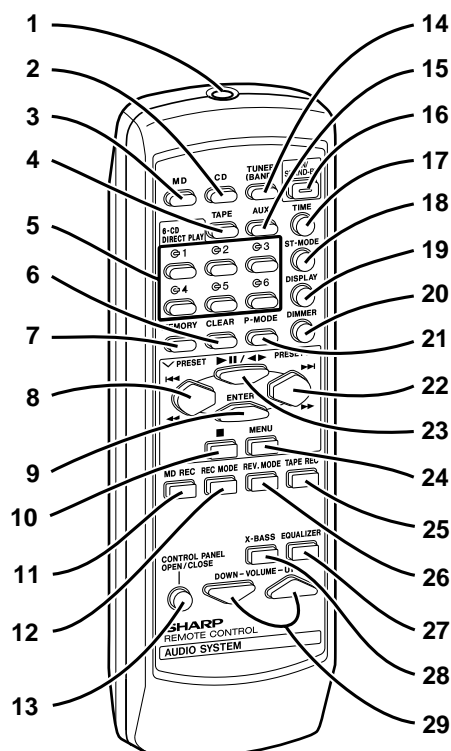
■ Remote control (CD-MD3000H)

1. Remote Control Transmitter
2. CD Button
3. MD Button
4. Tape Button
5. CD Direct Play Buttons
6. Clear Button
7. Memory Button
8. CD/MD Fast Reverse, Tape Fast Wind or Preset Down Button
9. Enter Button
10. Stop Button
11. Menu Button
12. MD Record Button
13. MD Record Mode Button
14. Time Button
15. FM Stereo Mode Button
16. Control Panel Open/Close Button
17. Tuner (Band) Button
18. Auxiliary Button
19. On/Stand-by Button
20. RDS Programme Type/T
21. RDS EON Button
22. RDS ASPM (Auto Station Programme Memory) Button
23. RDS Display Mode Selector Button
24. CD/MD Play Mode Select Button
25. CD/MD Fast Forward, Tape Fast Wind or Preset Up Button
26. CD/MD Play or Pause, Tape Play Button
27. Tape Reverse Mode Select Button
28. Tape Record Pause Button
29. Dimmer Button
30. Display Button
31. Equalizer Mode Select Button
32. Extra Bass Button
33. Volume Up or Down Buttons



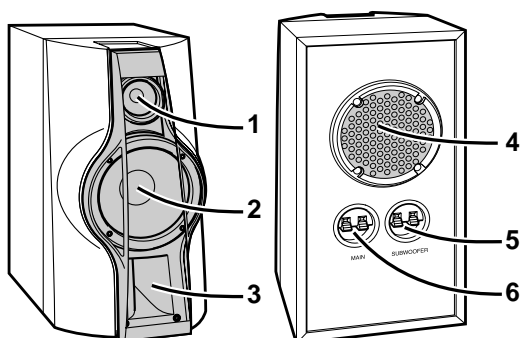
■ Remote control (CD-MD3000W)

1. Remote Control Transmitter
2. CD Button
3. MD Button
4. Tape Button
5. CD Direct Play Buttons
6. Clear Button
7. Memory Button
8. CD/MD Fast Reverse, Tape Fast Wind or Preset Down Button
9. Enter Button
10. Stop Button
11. MD Record Button
12. MD Record Mode Button
13. Control Panel Open/Close Button
14. Tuner (Band) Button
15. Auxiliary Button
16. On/Stand-by Button
17. Time Button
18. FM Stereo Mode Button
19. Display Button
20. Dimmer Button
21. CD/MD Play Mode Select Button
22. CD/MD Fast Forward, Tape Fast Wind or Preset Up Button
23. CD/MD Play or Pause, Tape Play Button
24. Menu Button
25. Tape Record Pause Button
26. Tape Reverse Mode Select Button
27. Equalizer Mode Select Button
28. Extra Bass Button
29. Volume Up or Down Buttons



CP-RW5000H/CP-RW5000W

1. Tweeter
2. Woofer
3. Bass Reflex Duct
4. Subwoofer
5. Subwoofer Terminals
6. Main Speaker Terminals



OPERATION MANUAL

Using the Radio Data System (RDS) (CD-MD3000H Only)

RDS is a broadcasting service which a growing number of FM stations provide. These FM stations send additional signals along with their regular programme signals. They send their station names, and information about the type of programme such as sports or music, etc.

When tuned to an RDS station, "RDS" and the station name will be displayed.

"TP" (Traffic Programme) will appear on the display when the received broadcast carries traffic information, and "TA" (Traffic Announcement) will appear whilst a traffic information is on air.

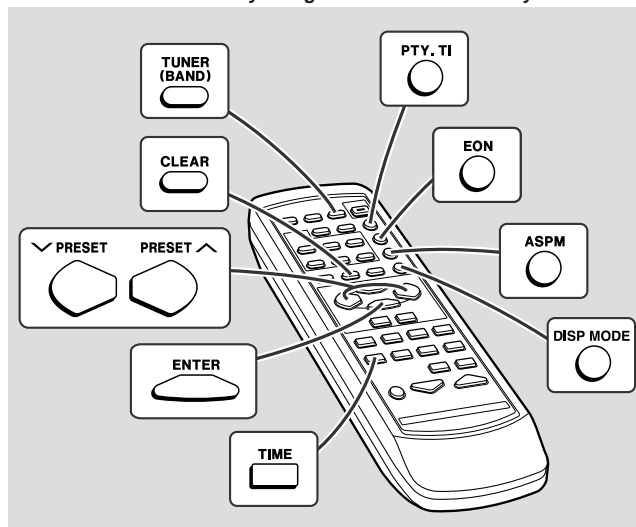
"EON" will appear whilst the EON (Enhanced Other Networks information) data is broadcast.

"PTYI" (Dynamic PTY Indicator) will appear whilst the Dynamic PTY station is received.

"RT" (Radio Text) will appear whilst the unit receives the Radio text data.

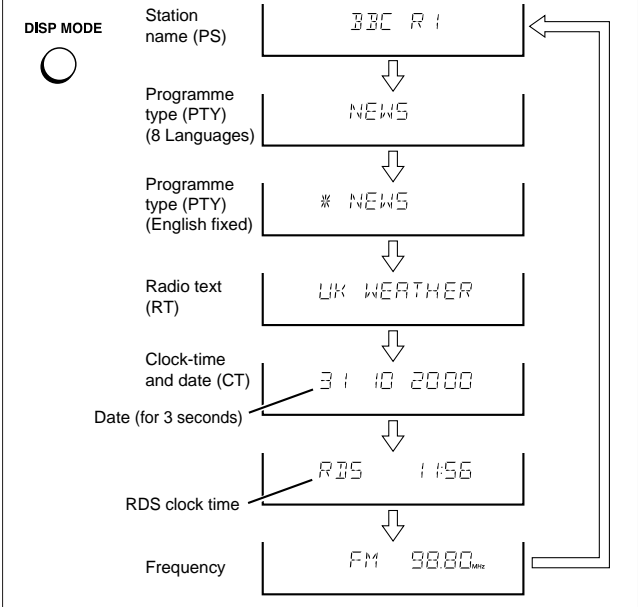
"CT" (Clock Time) will appear whilst the unit receives the RDS CT data.

You can control the RDS by using the remote control only.

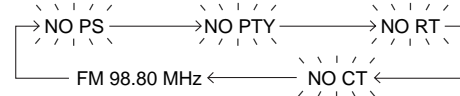


■ Information provided by RDS

Each time the DISP MODE button is pressed, the display will switch as follows:



When you are tuning in to a station other than an RDS station or to an RDS station which sends weak signal, the display will change in the following order:



Descriptions of the PTY (Programme Type) codes, TP (Traffic Programme) and TA (Traffic Announcement)

You can search for and receive the following PTY, TP and TA signals.

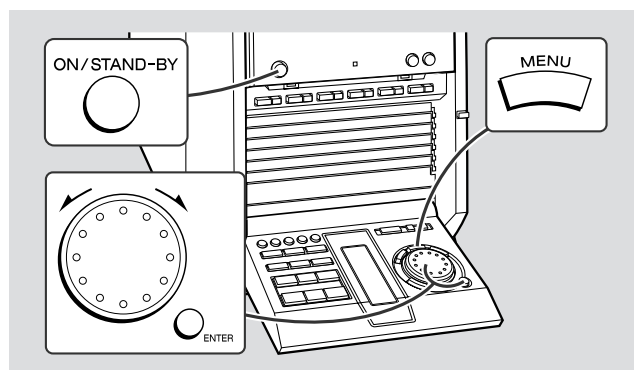
NEWS	Short accounts of facts, events and publicly expressed views, reportage and actuality.
AFFAIRS	Topical programme expanding or enlarging upon the news, generally in different presentation style or concept, including debate, or analysis.
INFO	Programmes whose purpose is to impart advice in the widest sense.
SPORT	Programme concerned with any aspect of sport.
EDUCATE	Programme intended primarily to educate, of which the formal element is fundamental.
DRAMA	All radio plays and serials.
CULTURE	Programmes concerned with any aspect of national or regional culture, including language, theatre, etc.
SCIENCE	Programmes about the natural sciences and technology.
VARIED	Used for mainly speech-based programmes usually of light-entertainment nature, not covered by other categories. Examples include: quizzes, panel games, personality interviews.
POP M	Commercial music, which would generally be considered to be of current popular appeal, often featuring in current or recent record sales charts.
ROCK M	Contemporary modern music, usually written and performed by young musicians.
EASY M	Current contemporary music considered to be "easy-listening", as opposed to Pop, Rock or Classical, or one of the specialised music styles, Jazz, Folk or Country. Music in this category is often but not always, vocal, and usually of short duration.
LIGHT M	Classical music for general, rather than specialist appreciation. Examples of music in this category are instrumental music, and vocal or choral works.
CLASSICS	Performances of major orchestral works, symphonies, chamber music, etc., and including Grand Opera.
OTHER M	Musical styles not fitting into any of the other categories. Particularly used for specialist music of which Rhythm & Blues and Reggae are examples.
WEATHER	Weather reports and forecasts and meteorological information.
FINANCE	Stock Market reports, commerce, trading, etc.
CHILDREN	For programmes targeted at a young audience, primarily for entertainment and interest, rather than where the objective is to educate.

SOCIAL	Programmes about people and things that influence them individually or in groups. Includes: sociology, history, geography, psychology and society.
RELIGION	Any aspect of beliefs and faiths, involving a God or Gods, the nature of existence and ethics.
PHONE IN	Involving members of the public expressing their views either by phone or at a public forum.
TRAVEL	Features and programmes concerned with travel to near and far destinations, package tours and travel ideas and opportunities. Not for use for announcements about problems, delays, or roadworks affecting immediate travel where TP/TA should be used.
LEISURE	Programmes concerned with recreational activities in which the listener might participate. Examples include, Gardening, Fishing, Antique collecting, Cooking, Food & Wine, etc.
JAZZ	Polyphonic, syncopated music characterised by improvisation.
COUNTRY	Songs which originate from, or continue the musical tradition of the American Southern States. Characterised by a straightforward melody and narrative story line.
NATION M	Current Popular Music of the Nation or Region in that country's language, as opposed to International 'Pop' which is usually US or UK inspired and in English.
OLDIES	Music from the so-called "golden age" of popular music.
FOLK M	Music which has its roots in the musical culture of a particular nation, usually played on acoustic instruments. The narrative or story may be based on historical events of the people.
DOCUMENT	Programme concerned with factual matters, presented in an investigative style.
TEST	Broadcast when testing emergency broadcast equipment or receivers.
ALARM !	Emergency announcement made under exceptional circumstances to give warning of events causing danger of general nature.
NONE	No programme type (receive only).
TP	Broadcasts which carry traffic announcements.
TA	Traffic announcements are being broadcast.

Note:

When you select a programme in the EON stand-by mode, the unit will display "TI" instead of "TA".

Setting the Clock

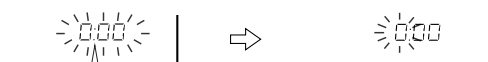


In this example, the clock is set for the 24-hour (0:00) display.

- 1 Press the ON/STAND-BY button to turn the power on.
- 2 Press the MENU button.
- 3 Turn the jog dial to select "CLOCK" and within 10 seconds, press the ENTER button.



- 4 Turn the jog dial to select the 24-hour or 12-hour display and within 2 minutes, press the ENTER button.



"0:00" → The 24-hour display will appear. (0:00 - 23:59)
 "AM 12:00" → The 12-hour display will appear. (AM 12:00 - PM 11:59)
 "AM 0:00" → The 12-hour display will appear. (AM 0:00 - PM 11:59)

- 5 Turn the jog dial to adjust the hour and within 2 minutes, press the ENTER button.



- When the 12-hour display is selected, "AM" will change automatically to "PM".

- 6 Turn the jog dial to adjust the minutes and within 2 minutes, press the ENTER button.



- The hour will not advance even if minutes advance from "59" to "00".
 - The clock starts from "0" second. (Seconds are not displayed.)
- The time display will disappear after a few seconds.

To confirm the time display:

[When the stand-by mode]

Press the DISPLAY button on the remote control.
 The time display will appear for about 3 seconds.

[When the power is on]

Press the MENU button.
 The time display will appear for about 10 seconds.

Note:

"CLOCK" will appear or time will flash at the push of the DISPLAY button when the AC power supply is restored after a power failure or after unplugging the unit.
 Reset the clock as follows.

To reset the clock:

[When time will flash]

1. Press the ON/STAND-BY button.
2. Press the MENU button.
3. Press the ENTER button.
4. Perform "Setting the Clock" from step 5.

[When "CLOCK" will appear]

Perform "Setting the Clock" from the beginning.

To change the 24-hour or 12-hour display:

1. Clear all the programmed contents.
 [Refer to "If trouble occurs (reset)" on page 57 for details.]
2. Perform "Setting the clock" from the beginning.

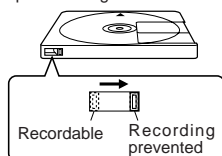
What is a MiniDisc?

The disc is stored in a cartridge. You can handle it easily without worrying about dust, fingerprints, etc. However, dust entering the opening of the cartridge, dirt on the cartridge, warping, etc. may cause malfunctions. Please note the following.

■ To prevent recorded MiniDiscs from being erased accidentally

Slide the accidental erase prevention tab, located on the side of the MiniDisc, in the direction indicated by the arrow.

- The MiniDisc will then be protected against accidental erasure.



To add a recording to such a MiniDisc, slide the accidental erase prevention tab back to its original position.

■ Helpful tip when attaching a label

When attaching a label to a MiniDisc cartridge, be sure to note the following. If the label is not attached properly, the MiniDisc may jam inside the unit and it may not be possible to remove it.

- If the label peels off or partially lifts away, replace it with a new one.
- Do not put a new label on top of an existing one.
- Attach the label only in the specified location.



■ Types of discs

There are two types of discs: playback-only and recordable types.

• Playback-only MiniDisc:

This type of MiniDisc is used for commercially available prerecorded music. This is the same kind of optical disc as CDs. Playback is performed using an optical pickup. (Recording and editing are not possible.)



A Shutter will be used on only one side (back).

• Recordable MiniDisc:

This is a "raw disc" on which recording can be performed. A magneto optical disc is used. Recordings are made using a laser and magnetic field. Repeated recording is possible.



Shutters will be used on both sides.

MiniDisc System Limitations

Even if the maximum recording time of a MiniDisc has not been reached, "TOC FULL" may be displayed.	In the MD system, the delimiter of the recording area on a MiniDisc is programmed in a TOC. If partial erasing, recording and editing are repeated several times, TOC information will fill up, even though the number of tracks has not reached the limit (255 tracks), and further recording will be impossible. (If you use the all erase function, this MiniDisc can be used from the beginning.)
Even if the maximum recording time of a MiniDisc has not been reached, "DISC FULL" may be displayed.	If there is any flaw on the MiniDisc, that part is automatically excluded from the space available for recording. Therefore, the recording time becomes shorter.
Even if several short tracks are erased, the remaining recording time may not show an increase.	When the remaining recording time of a disc is displayed, short tracks less than 12 seconds long may not be included in the total.
Two tracks may not be combined in editing.	For MiniDiscs on which repeated recording and editing operations were performed, the COMBINE function may not work. A track recorded from a CD (digital recording) and a track recorded from a radio or other equipment (analogue recording) cannot be combined.
The total of the recorded time and time remaining on a disc may not add up to the maximum possible recording time.	A cluster (about 2 seconds) is normally the minimum unit of recording. So, even if a track is less than 2 seconds long, it will use about 2 seconds of space on the disc. Therefore, the time actually available for recording may be less than the remaining time displayed. If there are scratches on discs, those sections will be automatically avoided (no recording will be placed in those sections). Therefore, the recording time will be reduced.
If recorded tracks are fast reversed or fast forwarded, the sound may skip.	A MiniDisc which has been recorded or edited repeatedly may skip during fast reverse or fast forward.

Error Messages

When an error message is displayed, proceed as follows:

Error messages	Meaning	Remedy
BLANK DISC	● Nothing is recorded. (Neither music nor disc name is recorded.)	● Replace it with another disc.
CAN'T COPY	● You tried to record from a copy prohibited CD.	● Replace the CD.
CAN'T EDIT	● A track cannot be edited.	● Change the stop position of the track and then try editing it.
CAN'T READ x (x :Number or symbol)	● The disc is damaged. ● TOC information cannot be read. ● MiniDisc not specified.	● Replace it with another disc. ● Erase the disc and try recording again.
CAN'T REC	● Recording cannot be performed correctly due to vibration or shock in the unit.	● Re-record or replace the MiniDisc.
CAN'T WRITE	● The TOC information could not be created properly due to a mechanical shock or to scratches on the disc.	● Set this unit to the stand-by mode and try to write the TOC again. (Remove any source of shock or vibration whilst writing.)
DISC FULL	● The disc is out of recording space.	● Replace the disc with another recordable disc.
E-CD 20	● The CD tray is not working properly.	● Set this unit to the stand-by mode and turn the power on again.
E-MD x x (x :Number or symbol)	● A MiniDisc is not working properly.	● Set this unit to the stand-by mode and turn the power on again.
EDIT OVER	● You chose 32 or more tracks for track editing.	● Decrease the number of tracks.
MD NO DISC CD NO DISC	● A MiniDisc has not been loaded. ● The MiniDisc data cannot be read. ● A CD has not been loaded. ● The CD data cannot be read.	● Load a MiniDisc. ● Reload the MiniDisc. ● Load a CD. ● Reload the CD.

Error messages	Meaning	Remedy
NAME FULL	● The number of characters for the disc name or track name exceeds 40.	● Shorten the disc or track name.
NO SIGNAL	● Poor connection of the digital cable. ● No output signal comes out from the connected unit to playback.	● Connect the digital cable securely. ● Playback with the connected unit.
NOT AUDIO	● The data recorded on this disc is not audio data.	● Select another track. ● Replace the disc.
OVER	● There is no space to make CD editing on the disc.	● Replace it with a disc that has enough time to record.
PLAY MD	● You tried to record on a playback-only disc.	● Replace it with another recordable disc.
PROTECTED	● The disc is write protected.	● Move the write protection tab back to its original position.
TEMP OVER	● The temperature is too high.	● Set this unit to the stand-by mode and wait for a whilst.
TOC FORM x x (x :Number or symbol)	● TOC information recorded on the MD does not match the MiniDisc specifications or it cannot be read.	● Replace it with another disc. ● Erase the disc and try recording again.
TOC FULL	● There is no space left for recording track numbers. ● There is no space left for recording character information.	● Replace it with another recordable disc. ● Erase the needless characters.
? DISC	● The data contains an error. ● MiniDisc not specified.	● Replace it with another disc.

Troubleshooting Chart

Many potential "problems" can be resolved by the owner without calling a service technician. If something is wrong with this product, check the following before calling your authorised SHARP dealer or service centre.

General

Symptom	Possible cause
● The clock is not on time.	● Did a power failure occur? Reset the clock. (Refer to page 17.)
● When a button is pressed, the unit does not respond.	● Set this unit to the power stand-by mode and then turn it back on. ● If the unit still malfunctions, reset it. (Refer to page 57.)
● No sound is heard.	● Is the volume level set to "0"? ● Are the headphones connected? ● Are the speaker wires disconnected?

CD player

Symptom	Possible cause
● Playback does not start.	● The disc is loaded up-side down.
● Playback stops in the middle or is not performed properly.	● The disc does not satisfy the standards. ● The disc is distorted or scratched.
● Playback sounds are skipped, or stopped in the middle of a track.	● Is the unit located near excessive vibrations? ● The disc is very dirty. ● Has condensation formed inside the unit?

MiniDisc

Symptom	Possible cause
● A recording cannot be made.	● Is the MiniDisc protected against accidental erasure? ● Did you try to make recording on a playback-only MiniDisc? ● Can you see the "DISC FULL" or "TOC FULL" message in the display?
● Even though a disc has been loaded, "NO DISC" or "CAN'T READ" is displayed. ● Playback sounds are skipped.	● The disc is very dirty. ● Is the unit located near excessive vibrations? ● Has condensation formed inside the unit?

Cassette deck

Symptom	Possible cause
● Cannot record.	● Is the erase-protection tab removed?
● Cannot record tracks with proper sound quality.	● Is it a normal tape? (You cannot record on a metal or CrO ₂ tape.)
● Cannot erase completely.	● Is there any slack? Is the tape stretched?
● Sound skipping.	● Are the capstans, pinch rollers, or heads dirty?
● Cannot hear treble.	● If a power failure occurs during playback, the heads remain engaged with the tape. Do not open the compartment forcibly. Wait until electricity resumes.
● Sound fluctuation.	
● Cannot remove the tape.	

Tuner

Symptom	Possible cause
● Radio makes unusual noise consecutively.	● The stereo system is placed near the TV or computer. ● FM/AM loop aerial is not placed properly. Move the AC power lead away from the aerial if located near.

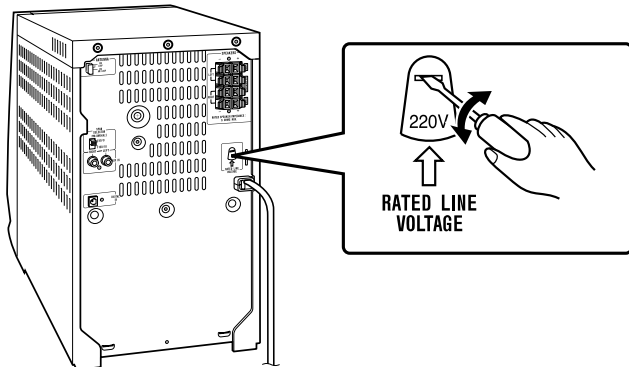
Remote control

Symptom	Possible cause
● The remote control does not operate.	● Is the AC power lead of the stereo system plugged in? ● The battery polarity is not correct. ● The batteries are dead. ● Incorrect distance or angle. ● Does the remote control sensor receive strong light?

System Connections (For CD-MD3000W Only)

■ Setting the AC voltage selector

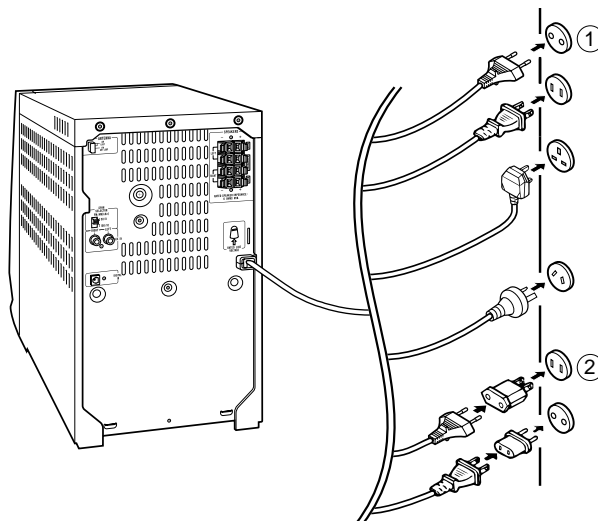
Check the setting of the AC voltage selector located on the rear panel before plugging the unit into an AC socket. If necessary, adjust the selector to correspond to the AC power voltage used in your area.



Turn the selector with a screwdriver until the appropriate voltage number appears in the window (110 V, 127 V, 220 V or 230 V - 240 V AC).

■ Connecting the AC power lead

After making all connections, plug the unit. If you plug the unit first, the unit will enter the demonstration mode



Notes:

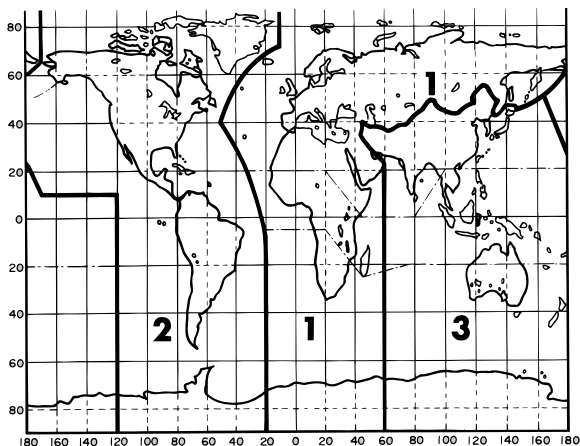
- Plug the AC power lead into an AC socket, after any connections.
- Unplug the AC power lead from the AC socket if the unit will not be in use for a prolonged period of time.

AC Plug Adaptor

In areas (or countries) where an AC socket as shown in illustration ② is used, connect the unit using the AC plug adaptor supplied with the unit, as illustrated. The AC plug adaptor is not included in areas where the AC wall socket and AC power plug can be directly connected (see illustration ①).

Note for users in Australia and New Zealand:

An AC plug adaptor is not supplied if the lead has an Australian Standard plug.



■ Setting the FM/AM span selector (For CD-MD3000W Only)

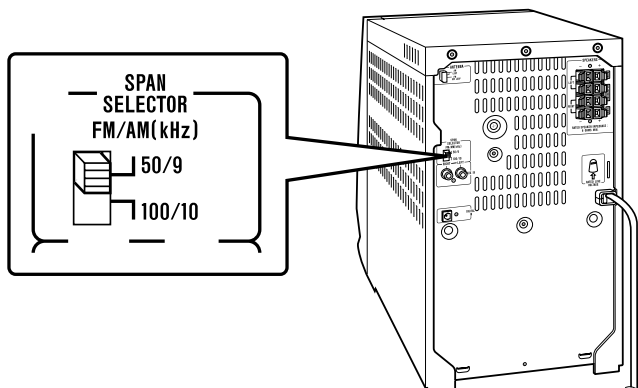
The International Telecommunication Union (ITU) has established that member countries should maintain either a 100 kHz or a 50 kHz interval between broadcasting frequencies of FM stations and 10 kHz or 9 kHz for AM station. The illustration shows the 50/9 kHz zones (regions 1 and 3), and the 100/10 kHz zone (region 2). Before using the unit, set the SPAN SELECTOR switch (on the rear panel) to the interval (span) of your area.

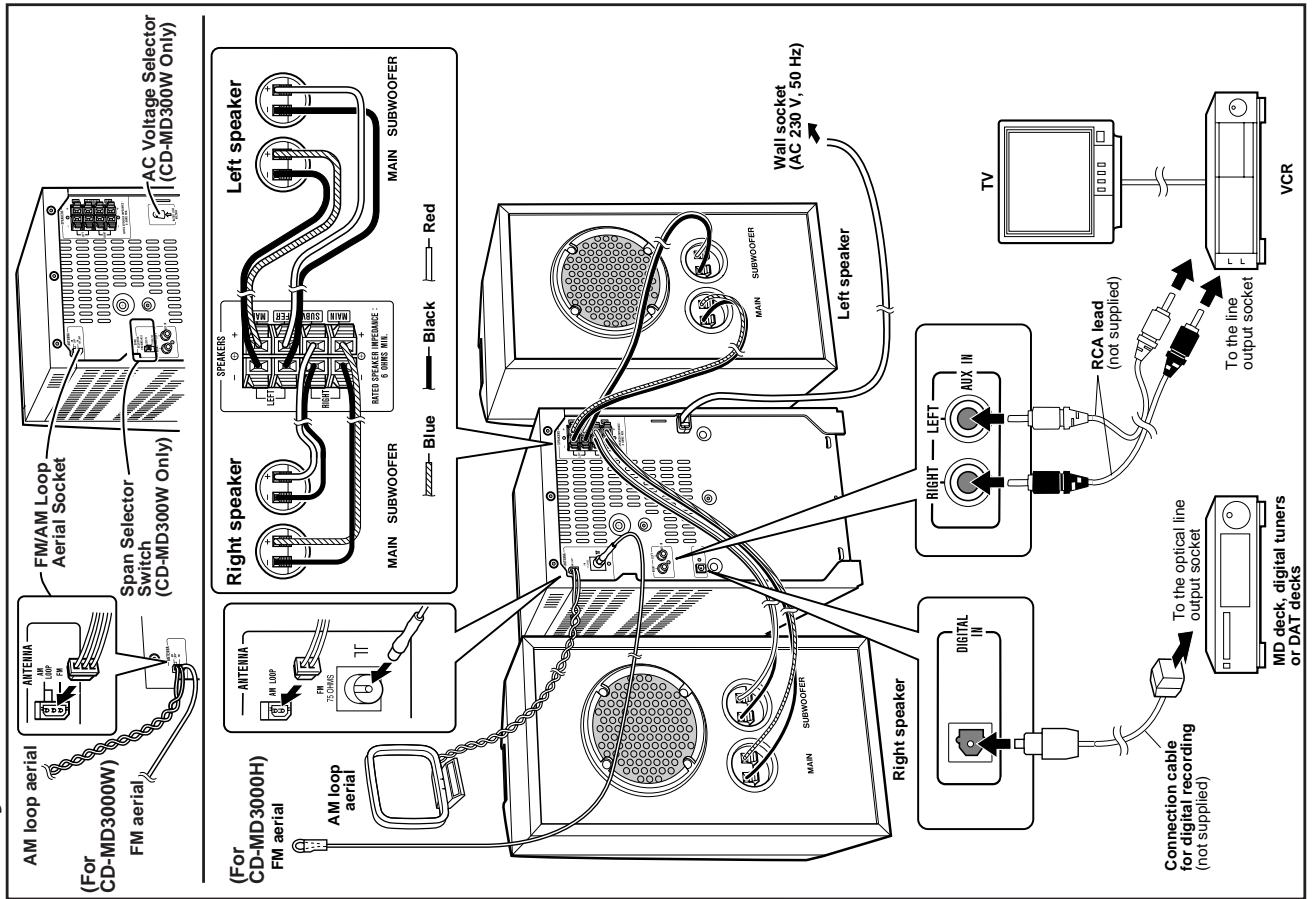
To change the tuning zone:

- 1 Press the ON/STAND-BY button to enter the stand-by mode.
- 2 Set the SPAN SELECTOR switch (on the rear panel) as follows.
 - For 50 kHz FM interval (9 kHz in AM) → 50/9
 - For 100 kHz FM interval (10 kHz in AM) → 100/10
- 3 Whilst pressing down the VOLUME ∇ button, press the ON/STAND-BY button until "ALL CLEAR" appears.

Caution:

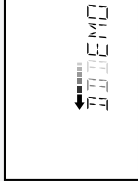
This operation will erase all data stored in memory including clock, timer settings, tuner preset, and CD or MiniDisc programme.



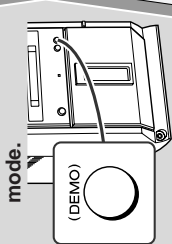


4 Turn on your System

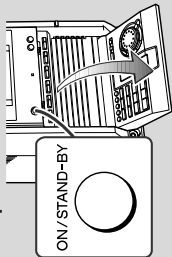
The first time the unit is plugged in, the unit will enter the demonstration mode. You will see words scroll.



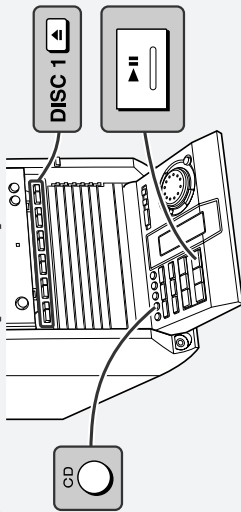
1 Press the DEMO button to cancel the demonstration mode.



2 Press the ON/STAND-BY button to turn the power on.



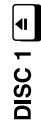
Listening to a CD (CDs)



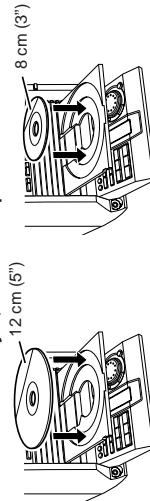
1 Press the CD button.



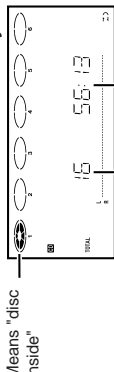
2 Press the DISC 1 button to open the disc tray 1.



3 Place the CD on the disc tray 1, label side up.



4 Press the DISC 1 button to close the disc tray 1.



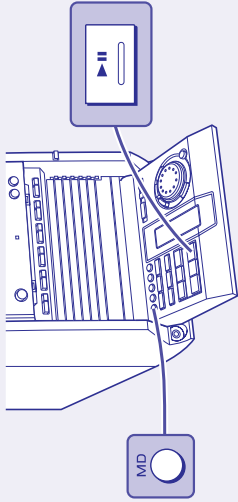
Total number of tracks Total playing time

5 You can place discs on the trays 2 - 6 by following steps 2 - 4.

6 Press the ►|| button to start playback.



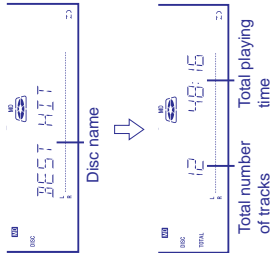
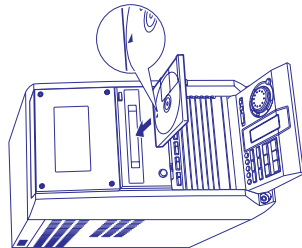
Listening to a MiniDisc



1 Press the MD button.



2 Load a MiniDisc into the MD compartment, label side up.

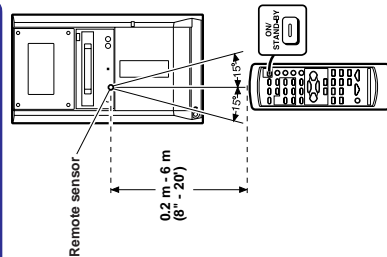


3 Press the ►|| button to start playback.

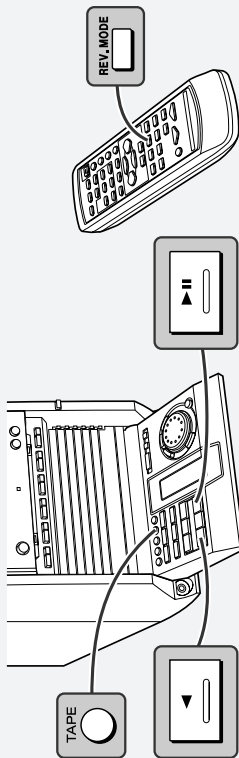


Test of the remote control

Face the remote control directly to the remote sensor on the unit.
The remote control can be used within the range shown below:
Press the ON/STAND-BY button. Does the power turn on?
Now, you can enjoy the music.



Listening to a Cassette Tape

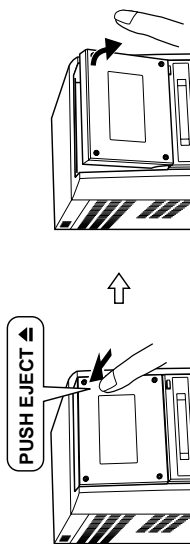


Press the TAPE button.

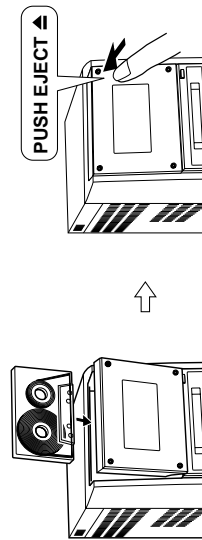


1

Open the cassette door by pushing the area marked "PUSH EJECT".



Load the cassette into the compartment with side A facing you.

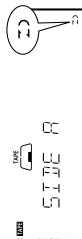


Press the REV. MODE button on the remote control to choose one side or both sides.

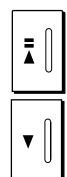


4

[REVERSE] ... To listen to both sides.
 [REVERSE] ... For endless repeat play of both sides.
 [REVERSE] ... To listen to one side.

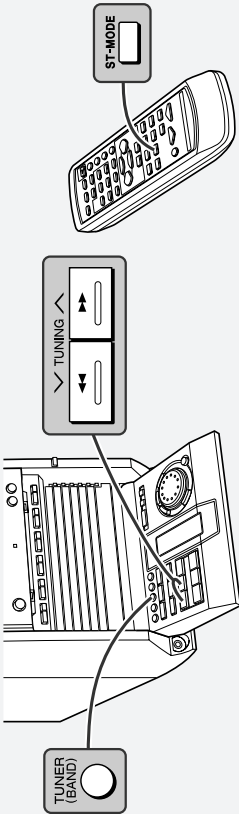


Press the 06 button to listen to side A, or the 1 button for side B.



5

Listening to the Radio



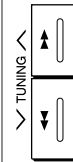
Press the TUNER (BAND) button repeatedly to select the desired frequency band (FM or AM).



1

Press the TUNING (V or ^) button to tune into the desired station.

- When the TUNING (V or ^) button is pressed for more than 0.5 seconds, scanning will start automatically and the tuner will stop at the first receivable broadcast station.



2

To receive an FM stereo transmission, press the ST-MODE button on the remote control. The "ST" indicator lights up.

- "CD" will appear when an FM broadcast is in stereo.



3

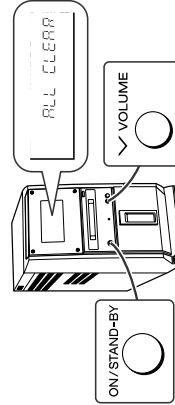


If trouble occurs (reset)

When this product is subjected to strong external interference (mechanical shock, excessive static electricity, abnormal supply voltage due to lightning, etc.) or if it is operated incorrectly, it may malfunction.

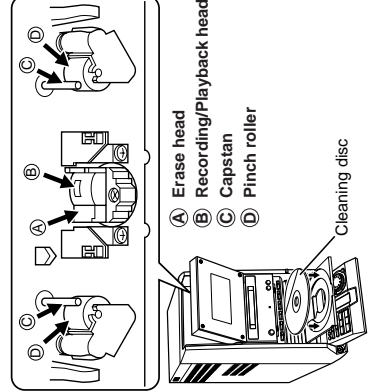
If such a problem occurs, do the following:

- Press the ON/STAND-BY button to enter the power stand-by mode.
- Whilst pressing down the VOLUME V button, press the ON/STAND-BY button until "ALL CLEAR" appears.



Maintenance

- Dirty heads, capstans or pinch rollers can cause poor sound and tape jams. Clean these parts with a cotton swab moistened with commercial head/pinch roller cleaner or isopropyl alcohol.
- When cleaning the heads, pinch rollers, etc., unplug the unit which contains high voltages.
- After long use, the deck's heads and capstans may become magnetised, causing poor sound. Demagnetise these parts once every 30 hours of playing/recording time by using a commercial tape head demagnetiser. Read the demagnetiser's instructions carefully before use.
- Clean the dust or stain on the CD pickup lens using a commercial cleaning disc (brush type).



DISASSEMBLY

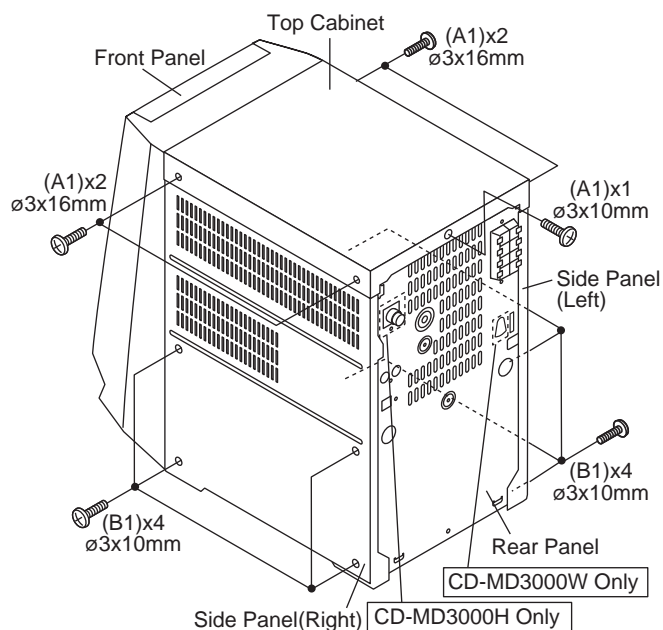
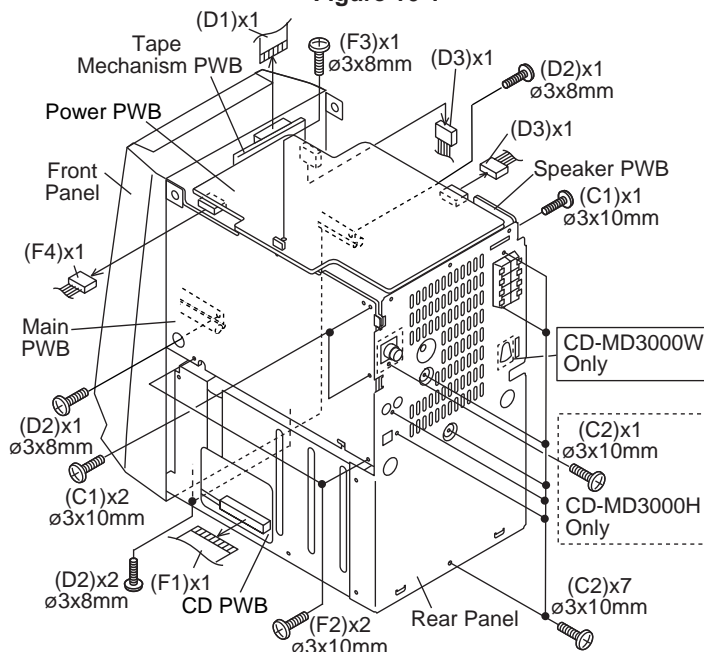
Caution on Disassembly

Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:

1. Take cassette tape, compact disc and mini disc out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3. Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

CD-MD3000H/CD-MD3000W

STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet	1. Screw (A1) x5	16-1
2	Side Panel(Left/Right)	1. Screw (B1) x8	16-1
3	Rear Panel	1. Screw (C1) x3 2. Screw (C2) x8 (For CD-MD3000H) 2. Screw (C2) x7 (For CD-MD3000W)	16-2
4	Front Panel	1. Flat Cable (D1) x1 2. Screw (D2) x4 3. Socket (D3) x6	16-2
5	Sub Trans PWB	1. Screw (E1) x3 2. Socket (E2) x5	16-2
6	Main PWB	1. Flat Cable (F1) x1 2. Screw (F2) x2 3. Screw (F3) x1 4. Socket (F4) x2 5. Flat Cable (F5) x1	16-2
7	MD Mechanism/ Relay PWB	1. Socket (G1) x2 2. Screw (G2) x1 2. Screw (G3) x4	17-1
8	Power PWB/ Speaker PWB	1. Socket (H1) x1 (For CD-MD3000H) 1. Socket (H1) x2 (For CD-MD3000W) 2. Screw (H2) x2	17-1
9	Tape Mechanism	1. Open the cassette holder 2. Screw (J1) x4	17-2
10	CD Switch PWB/ MD Switch PWB	1. Socket (K1) x1 2. Screw (K2) x6 3. Hook (K3) x2	17-2
11	Switch PWB	1. Screw (L1) x1	17-2
12	Headphones PWB	1. Screw (M1) x1 2. Bracket (M2) x1	17-2
13	CD Changer door panel/ Control Panel	1. Screw (P1) x3 2. Screw (P2) x2	17-2
14	Motor PWB	1. Solder (Q1) x2	17-2
15	CD Changer door panel	1. Screw (R1) x4	17-3
16	Control Panel	1. Screw (S1) x6	17-3
17	Control PWB	1. Screw (T1) x5 2. Socket (T2) x1	17-4
18	Jog PWB	1. Screw (U1) x5	17-4
19	LED B PWB	1. Screw (V1) x3	17-4
20	Cassette holder Cover	1. Open the cassette holder Cover 2. Screw (W1) x4 3. Display Panel (W2) x1 4. Hook (W3) x4	17-5
21	Display PWB/ LED A PWB	1. Screw (X1) x4 2. Hook (X2) x2	17-6

CD-MD3000H/CD-MD3000W**Figure 16-1****Figure 16-2**

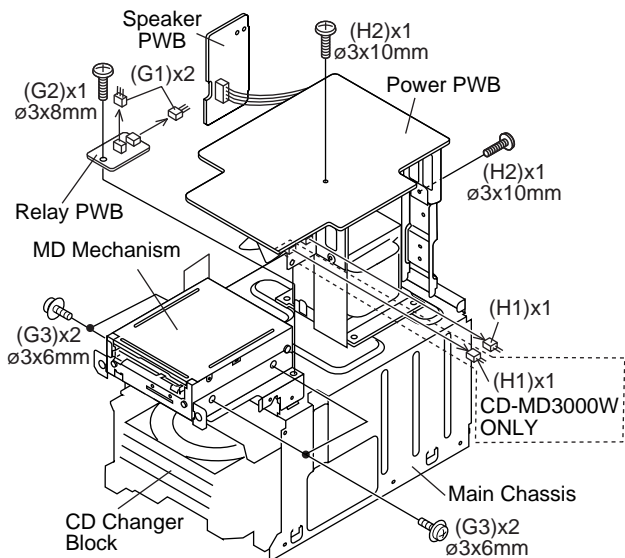


Figure 17-1

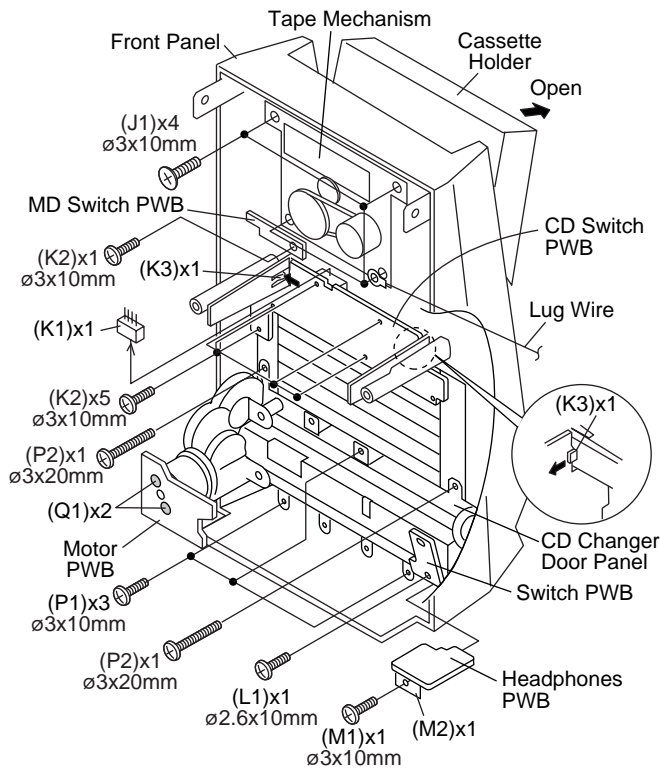


Figure 17-2

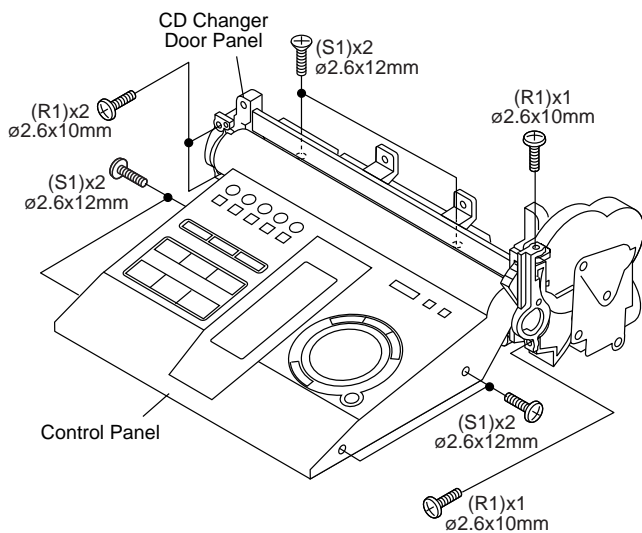


Figure 17-3

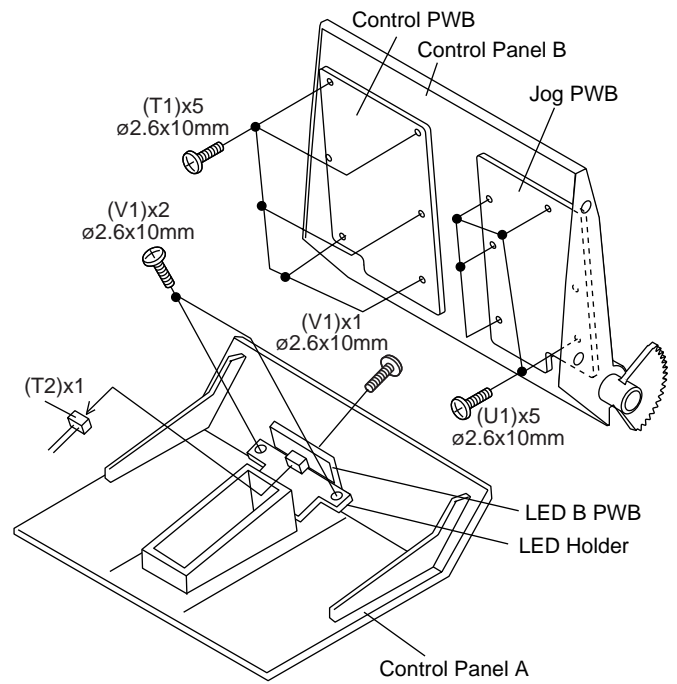


Figure 17-4

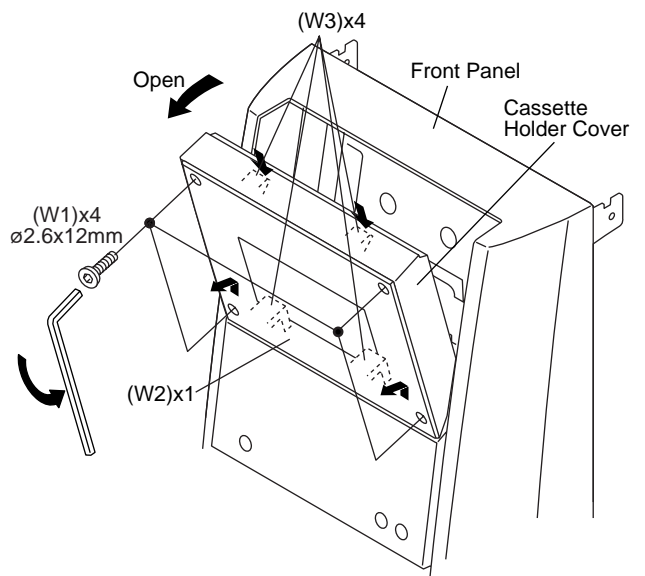


Figure 17-5

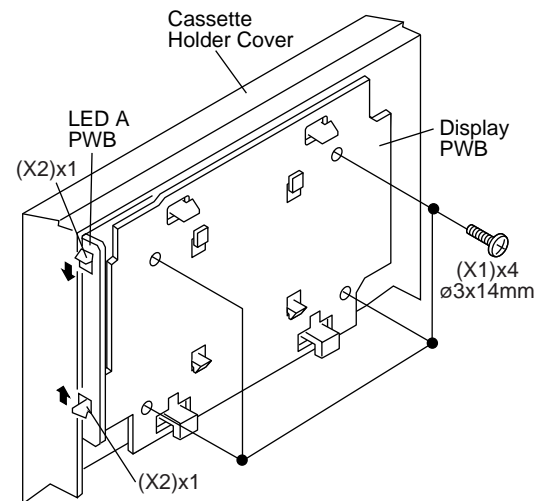


Figure 17-6

CD-MD3000H/CD-MD3000W

CD-MD3000H/CD-MD3000W (CD CHANGER MECHANISM UNIT)			
STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet	1. Screw (A1) x5	16-1
2	Side Panel(Left/Right)	1. Screw (B1) x8	16-1
3	Rear Panel	1. Screw (C1) x3 2. Screw (C2) x8 (For CD-MD3000H) 2. Screw (C2) x7 (For CD-MD3000W)	16-2
4	Front Panel	1. Flat Cable (D1) x1 2. Screw (D2) x4 3. Socket (D3) x6	16-2
5	CD Changer Mechanism	1. Flat Cable (Y1) x1 2. Screw (Y2) x2 3. Screw (Y3) x5	18-1
6	CD PWB (Note)	1. Screw (Z1) x4 2. Socket (Z2) x4 3. Flat Wire (Z3) x2	18-2
7	CD Mechanism	1. Screw (ZZ1) x4	18-2

Note:

After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of connector remove to protect the optical pickup from electrostatic damage.

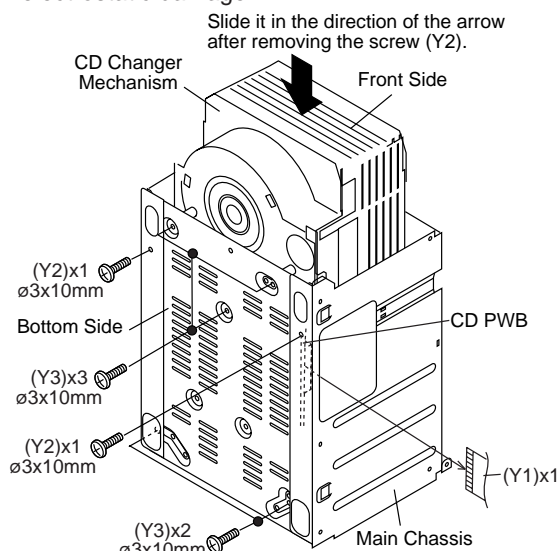


Figure 18-1

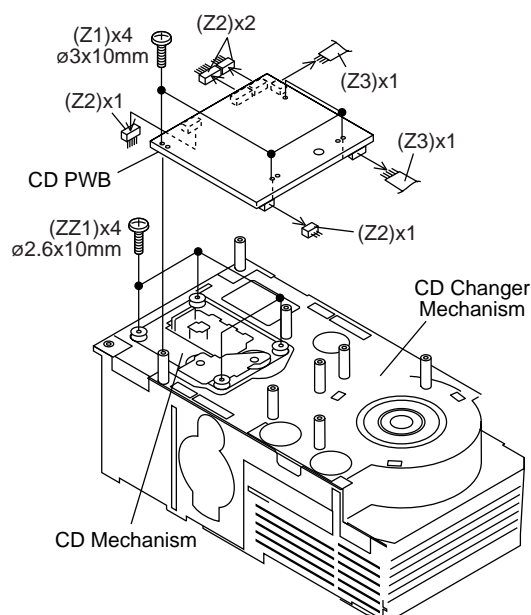
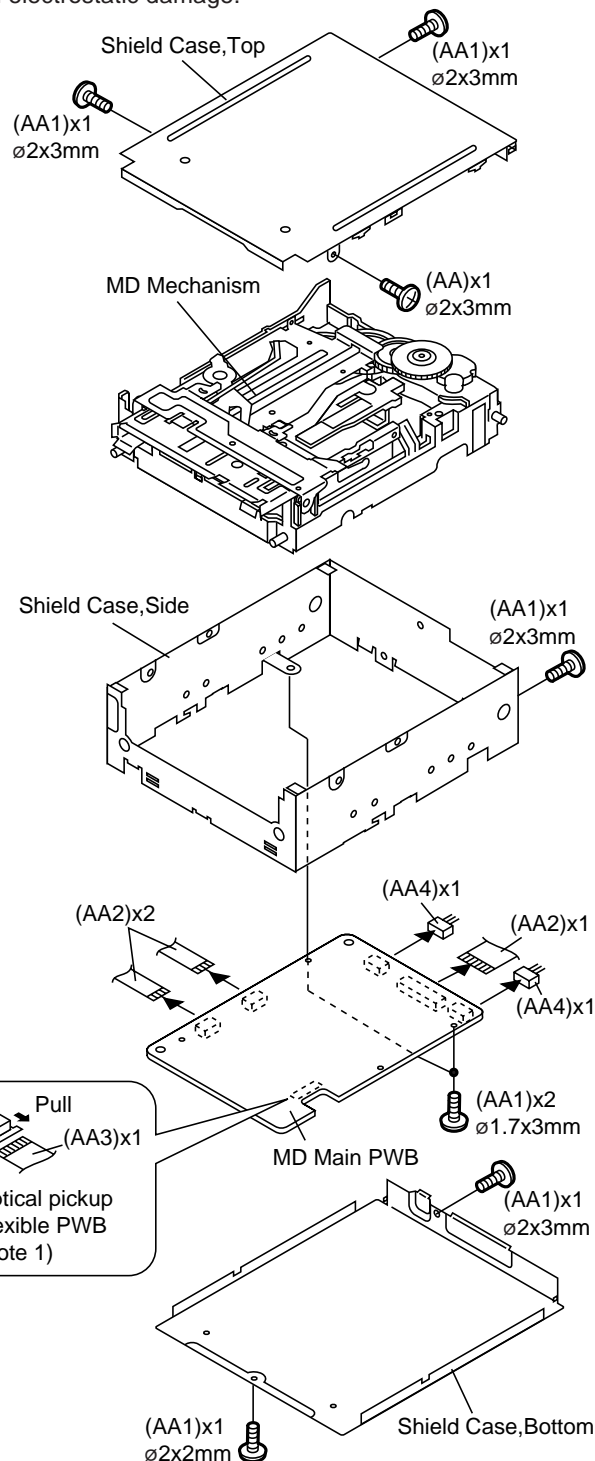


Figure 18-2

CD-MD3000H/CD-MD3000W (MD MECHANISM)			
STEP	REMOVAL	PROCEDURE	FIGURE
1	MD Mechanism/ MD Main PWB	1. Screw (AA1) x8 2. Flat Cable (AA2) x3 3. Flexible PWB . (AA3) x1 4. Socket (AA4) x2	18-3

Note:

After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of connector remove to protect the optical pickup from electrostatic damage.



(Note 1) After removing the flexible PWB for optical pickup from the connector wrap the front end of flexible PWB in conductive aluminum foil so as to protect the optical pickup from being damaged electrostatically.

Figure 18-3

CP-RW5000H/CP-RW5000W			
STEP	REMOVAL	PROCEDURE	FIGURE
1	Woofer/Tweeter/ Sub Woofer	1. Net (A1) x1	19-1
		2. Front Panel ... (A2) x1	19-2
		3. Screw (A3) x4	
		4. Ring (A4) x1	
		5. Catching holder .. (A5) x2	
		6. Screw (A6) x2	
		7. Cover (A7) x1	
		8. Screw (A8) x2	
		9. Screw (A9) x4	19-3
		10. Cover (A10) x1	

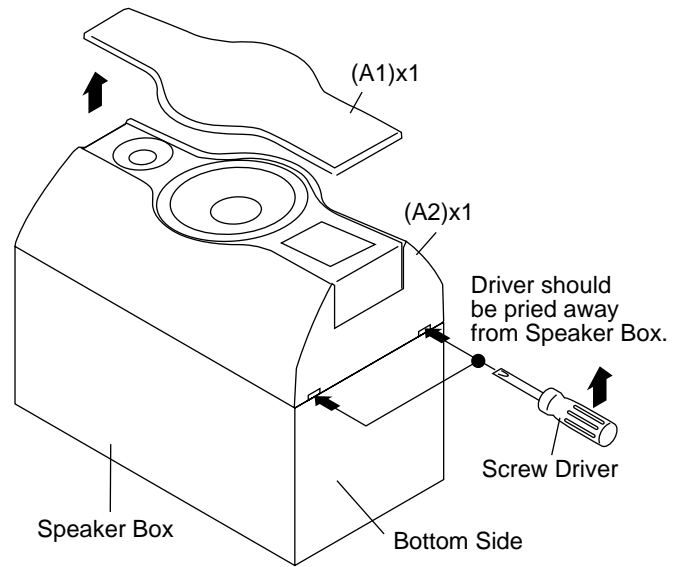


Figure 19-1

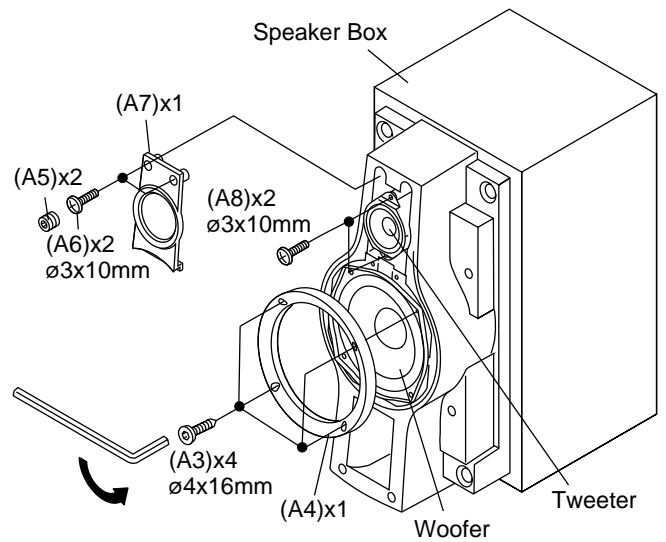


Figure 19-2

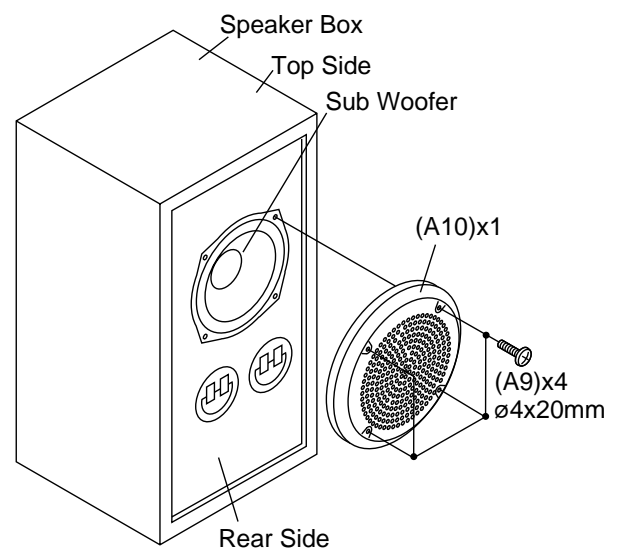


Figure 19-3

REMOVING AND REINSTALLING THE MAIN PARTS

MD MECHANISM SECTION

For details about the procedure to remove the MD mechanism from the main unit, refer to the Disassembly Procedure, Steps 1-7 in the main unit and also the MD section.

(Referring to page18)

Caution:

After pulling out the optical pickup connector, wrap the end of the connector in conductive aluminium foil to prevent the optical pickup from being destroyed by static electricity.

How to remove the magnetic head

(See Fig. 20-1)

1. Remove the screws (A1) x 1 pc.

Caution:

Take utmost care so that the magnetic head is not damaged when it is mounted.

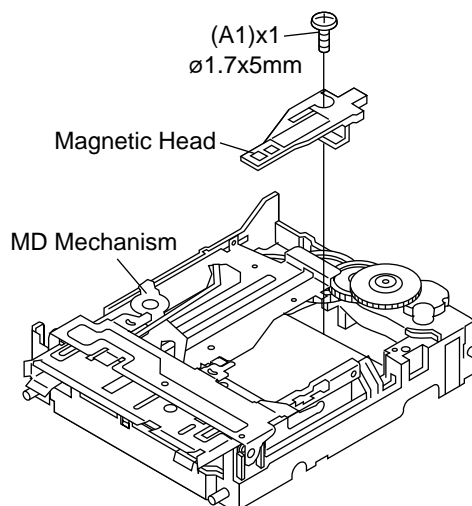


Figure 20-1

How to remove the MD loading motor PWB/MD loading motor

(See Fig. 20-2)

1. Remove the screw (B1) x 1 pc.
2. Remove the Hook (B2) x 3 pcs., and remove the MD Loading PWB.
3. Remove the screw (B3) x 2 pcs., and remove the MD Loading motor.

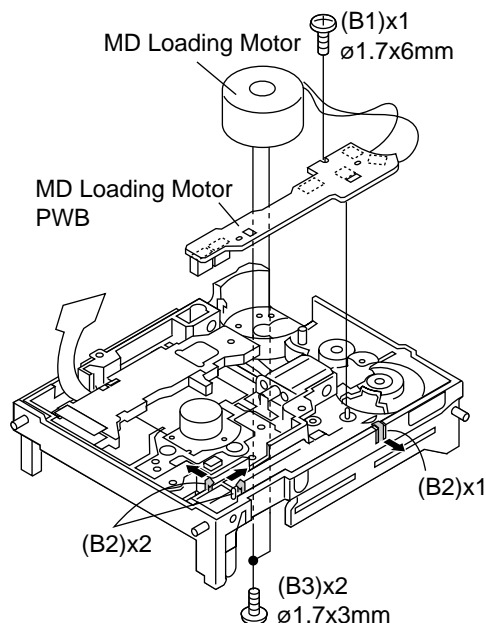


Figure 20-2

How to remove the MD sled motor/optical pickup

(See Fig. 20-3)

1. Remove the screws (C1) x 3 pcs., and remove the MD sled motor.
2. Remove the optical pickup.

Caution:

Be careful so that the gear is not damaged.
(The damaged gear emits noise during searching.)

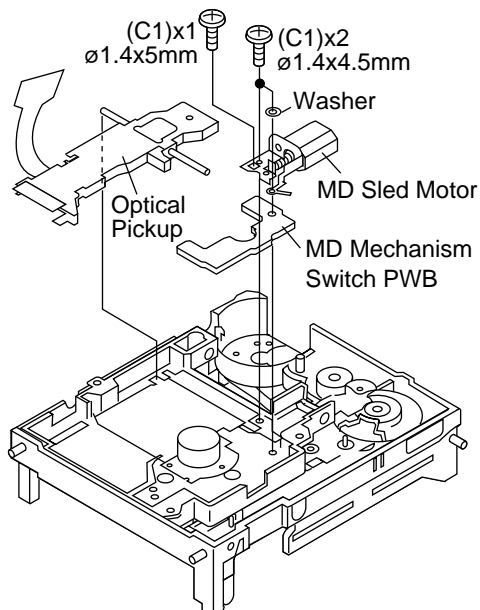


Figure 20-3

How to remove the MD spindle motor

(See Fig. 21-1)

1. Remove the screws (D1) x 3 pcs., and remove the MD spindle motor.

Caution:

Be careful so that the gear is not damaged.
(The damaged gear emits noise during searching.)

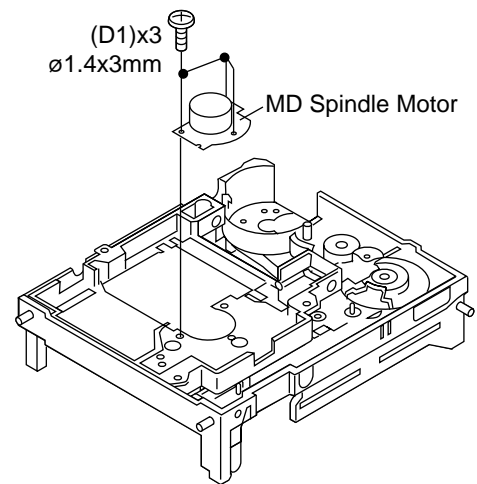


Figure 21-1

CD MECHANISM SECTION

Perform steps 1 to 7 of the disassembly method to remove the CD mechanism. (See page 18.)

How to Remove the pickup (See Fig. 21-2.)

1. Remove the screws (A1) x 2 pcs., to remove shaft (A2) x 1 pc.
2. Remove stop washer (A3) x 1 pc., to remove gear (A4) x 1 pc.
3. Remove the pickup.

Note:

After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of connector remove to protect the optical pickup from electrostatic damage.

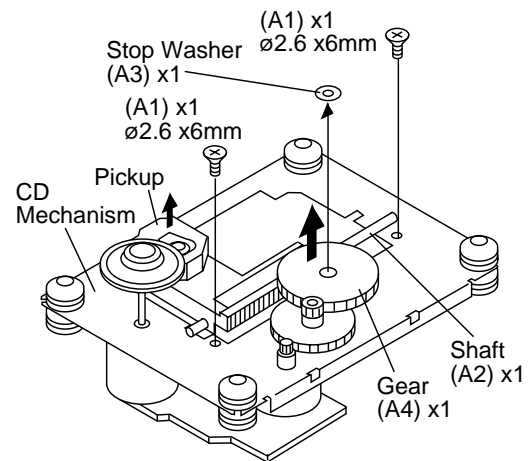


Figure 21-2

CD CHANGER MECHANISM SECTION

Perform steps 1 to 5 of the disassembly method to remove the CD changer mechanism. (See page 18.)

How to Remove the tray motor/main cam motor (See Fig. 21-3.)

1. Remove the screws (B1) x 4 pcs., to remove the CD PWB.
2. Remove the (1) front top plate, (2) changer box, left/right and (3) disc trays 1~6. After that, disassemble as shown in the figure.
3. Remove the screws (B2) x 4 pcs.
4. Remove the tray motor and main cam motor.

Note:

The parts of (1), (2) and (3) correspond to the drawing Nos. 117, 102, 103 and 108 to 113 of the CD change mechanism disassembly drawing.

Remove the screws of 117, 102 and 103, and the parts of (1), (2) and (3) will be ready for removal and the screws of the tray motor and main cam motor will be visible.

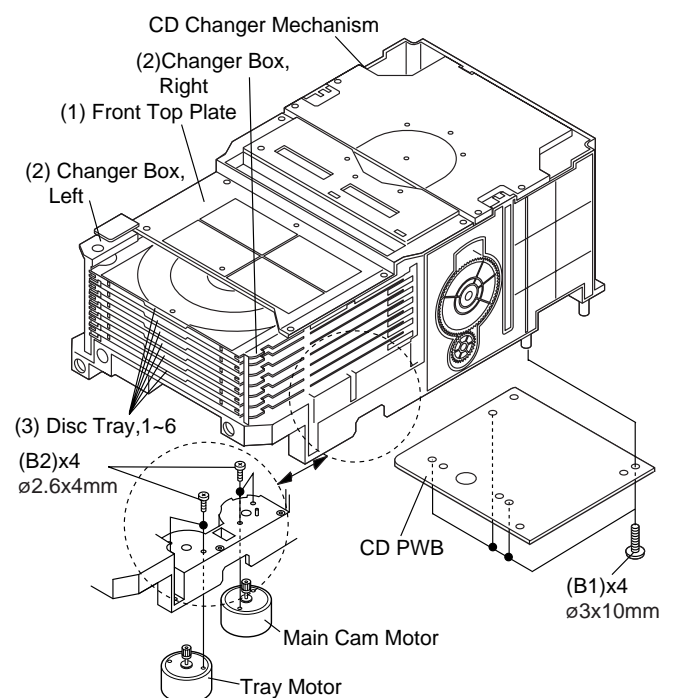


Figure 21-3

CD-MD3000H/CD-MD3000W

TAPE MECHANISM SECTION

Perform steps 1 to 4 and 9 of the disassembly method to remove the tape mechanism.

How to remove the record/playback and erase heads (See Fig. 22-1)

1. When you remove the screws (A1) x 2 pcs., the recording/playback head and three-dimensional head of the erasing head can be removed.

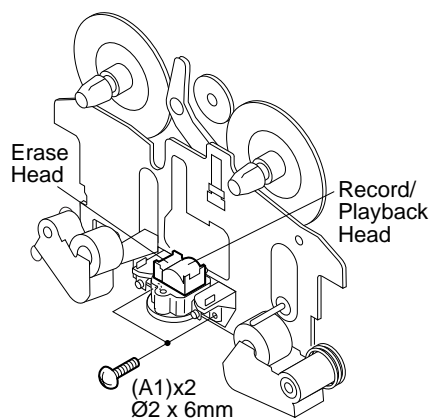


Figure 22-1

How to remove the pinch roller (See Fig. 22-2)

1. Carefully bend the pinch roller pawl in the direction of the arrow <A>, and remove the pinch roller (B1) x 1 pc., in the direction of the arrow .

Note:

When installing the pinch roller, pay attention to the spring mounting position.

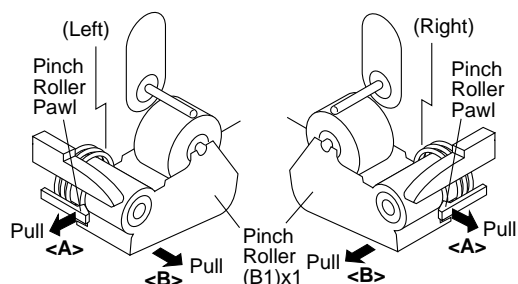


Figure 22-2

How to remove the belt (See Fig. 22-3)

1. Remove the motor.
2. Remove the main belt (C1) x 1 pc., from the motor side.
3. Remove the FF/REW belt (C2) x 1 pc.

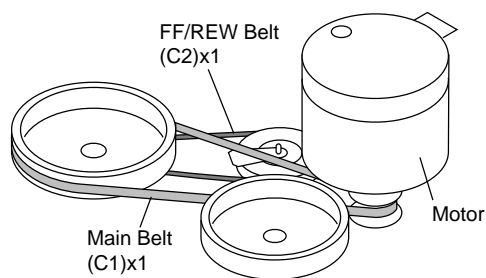


Figure 22-3

How to remove the motor (See Fig. 22-4)

1. Remove the belt.
2. Remove the screws (D1) x 2 pcs., to remove the motor.

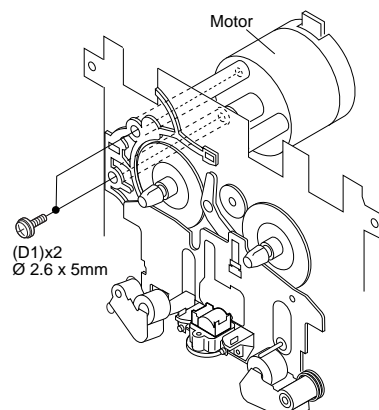


Figure 22-4

FRONT PANEL SECTION

Perform steps 1 to 4 of the disassembly method to remove the front panel.

How to remove the control panel motor (See Fig. 22-5)

1. Remove the control panel.
2. Remove the screws (E1) x 6 pcs., to remove the CD changer door panel.
3. Remove the screws (F1) x 2 pcs., to remove the control panel motor.

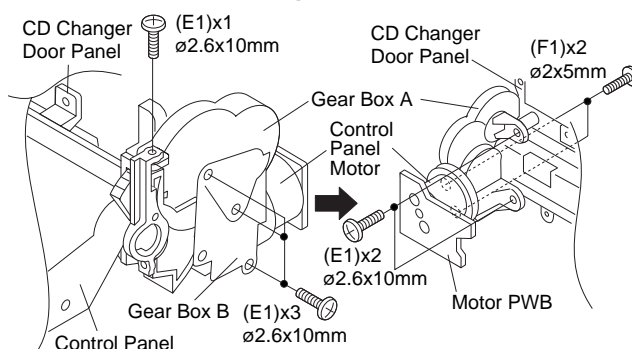


Figure 22-5

CD CHANGER MECHANISM MAIN BASE PARTS ASSEMBLING/ADJUSTING PROCEDURE

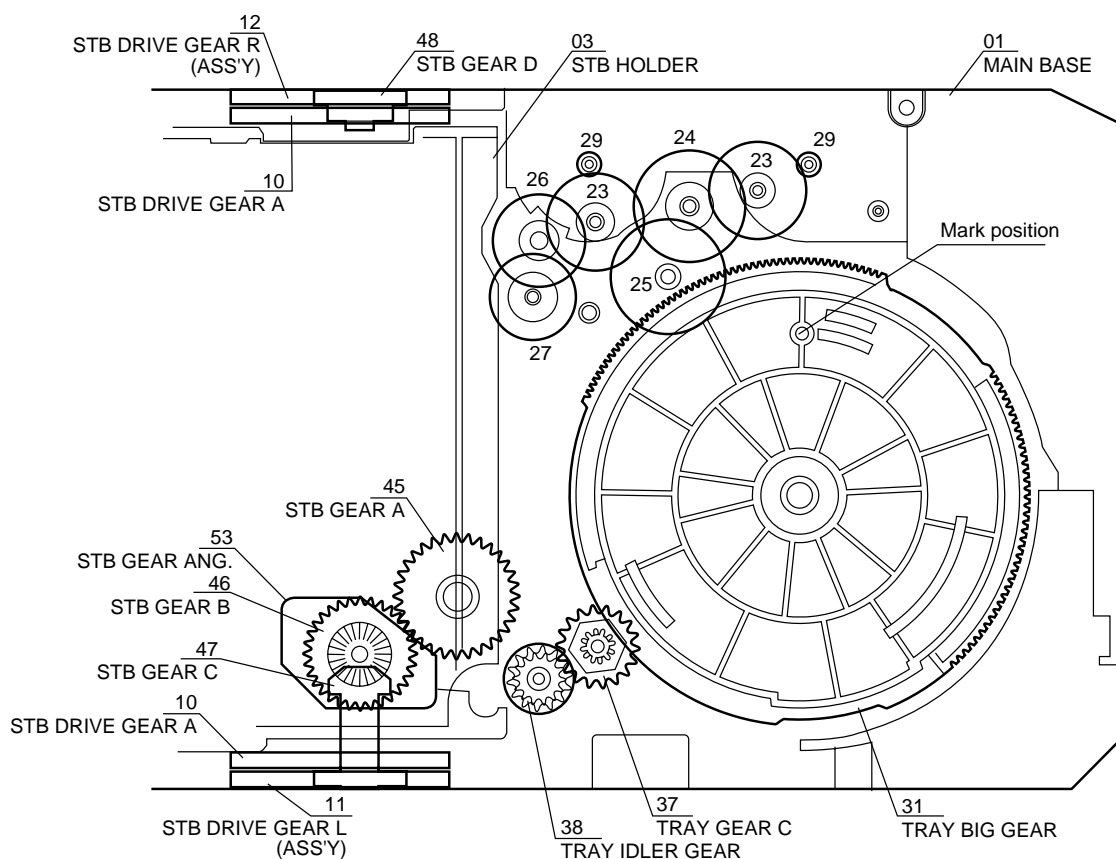
Work content	Applied part No.	Assembly fig. No.	Remarks
1. Motor assembly (x 2) mounting (screw x 4)	01/29	Fig.24	
2. MT idle gear mounting (screw x 1)	25	Fig.24	
3. MT system gear assembly	23/24/26/27	Fig.24	
4. STB/tray drive system gear and others assembling/ mounting (screw x 3)	37/38/45/46 (53)/47/48	Fig.24	
5. Tray big gear assembly	31	Fig.24	Gear positioning
6. T.M SW PWB mounting (screw x 3)		Fig.25	
7. STB holder assembling	03	Fig.24	
8. STB drive gear L/R assembly mounting (screw x 2)	11 (10)/12 (10)	Fig.24	
9. Tray joint gear R/tray drive gear R assembling	34/36	Fig.25	Gear positioning
10. Tray gear A/B assembling	32/33	Fig.25	Gear positioning
11. Lift gear B/C assembling	43/44	Fig.26	Gear positioning
12. MT idler gear F assembling, mode big gear mounting (screw x 1)	28/41	Fig.26	
13. Change box R mounting (screw x 4)	04	Fig.26	
14. Lift gear A assembling	42	Fig.26	Gear positioning
15. Change box L assembly mounting (screw x 4)	02/30/35	Fig.27	
16. Lift cam assembling (shaft inserting)	40	Fig.27	Gear positioning
17. STB holder height adjusting		Fig.28	Check/adjustment
18. Top plate F/disc OB LEV. Mounting (screw x 6)	80	Fig.28	
19. Trays 1 - 6 assembling	91/92/93/94/95/96	Fig.29	
20. Top plate R mounting (screw x 6)		—	

CD CHANGER MECHANISM PARTS LIST

No.	Part name
01 (101)	MAIN BASE
02 (102)	CHANGE BOX L
03 (147)	STB HOLDER
04 (103)	CHANGE BOX R
10 (119)	STB DRIVE GEAR A
11 (120)	STB DRIVE GEAR L
12 (122)	STB DRIVE GEAR R
20 (149)	STABILIZER FH
23 (141)	MT IDLER GEAR A
24 (138)	MT IDLER GEAR B
25 (137)	MT IDLER GEAR C
26 (140)	MT IDLER GEAR D
27 (139)	MT IDLER GEAR E
28 (131)	MT IDLER GEAR F
29 (MOB1,2)	MOTOR GEAR
30 (143)	TRAY DRIVE GEAR F
31 (134)	TRAY BIG GEAR
32 (135)	TRAY GEAR A
33 (136)	TRAY GEAR B
34 (124)	TRAY DRIVE GEAR R
35 (144)	TRAY JOINT GEAR F
36 (125)	TRAY JOINT GEAR R
37 (142)	TRAY GEAR C
38 (130)	TRAY IDLER GEAR

No.	Part name
40 (115)	LIFT CAM
41 (126)	MODE BIG GEAR
42 (127)	LIFT GEAR A
43 (128)	LIFT GEAR B
44 (129)	LIFT GEAR C
45 (132)	STB GEAR A
46 (104)	STB GEAR B
47 (133-1)	STB GEAR C
48 (133-3)	STB GEAR D
50 (145)	LIFT LEVER
51 (106)	TRAY LOCK LEVER
52 (118)	DISC OB LEVER
53 (105)	STB GEAR ANG.
80 (117)	TOP PLATE F
81 (114)	TOP PLATE R
91 (108)	TRAY 1
92 (109)	TRAY 2
93 (110)	TRAY 3
94 (111)	TRAY 4
95 (112)	TRAY 5
96 (113)	TRAY 6

The number of () is the number of the parts guide.



After assembling TRAY BIG GEAR, turn it in the arrow direction.

TRAY BIG GEAR ASSEMBLING POSITION

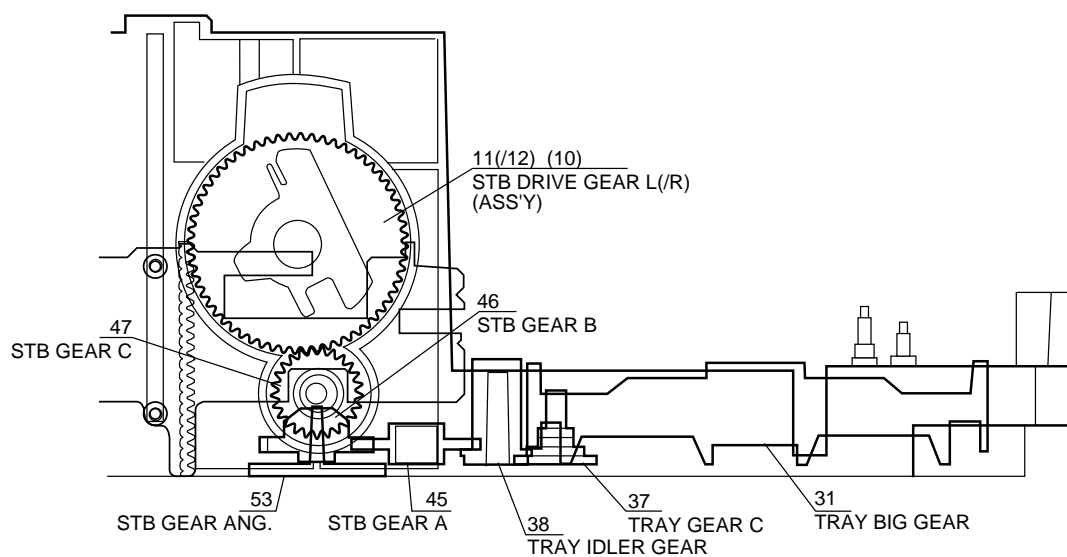


Figure 24

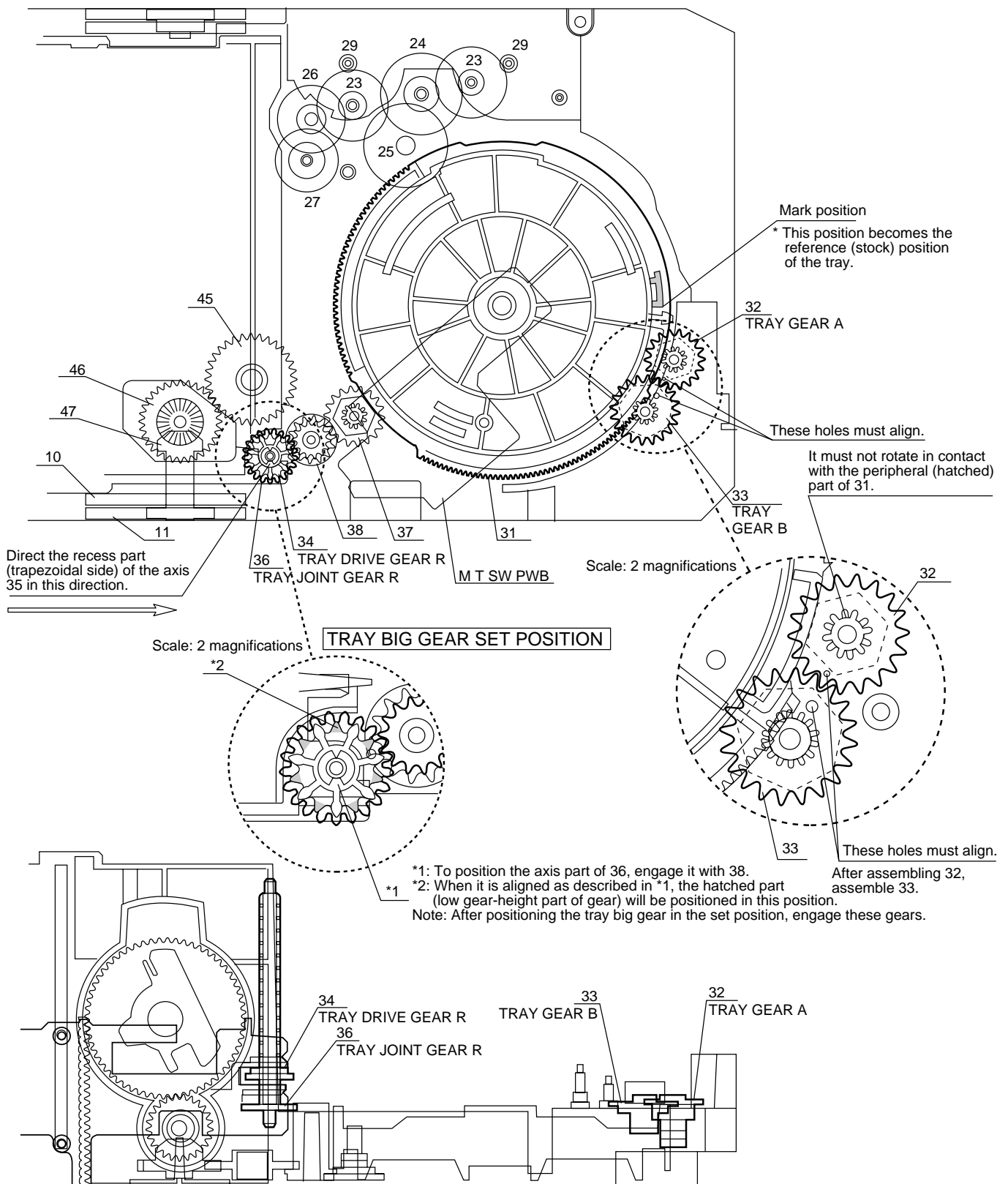


Figure 25

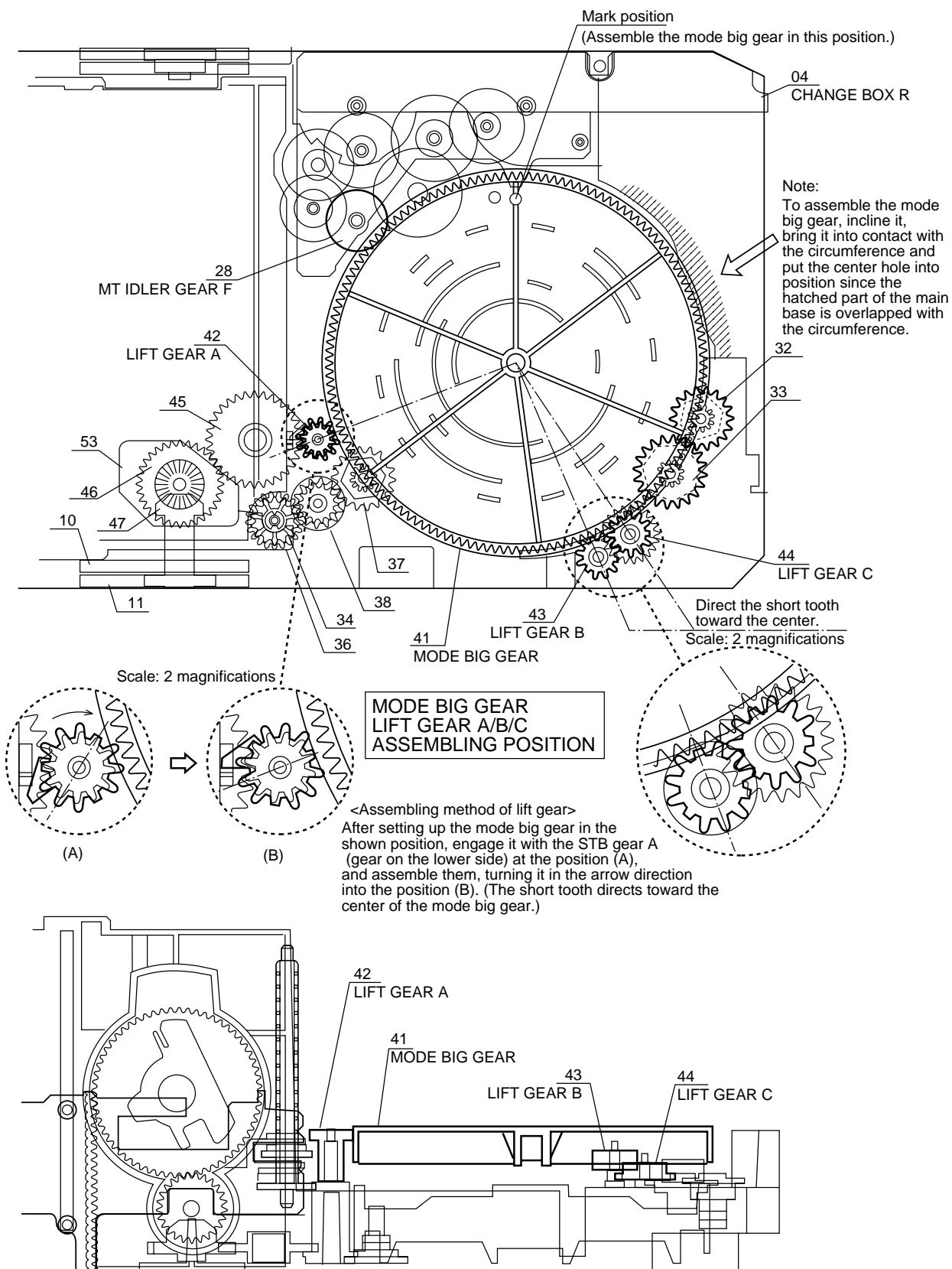


Figure 26

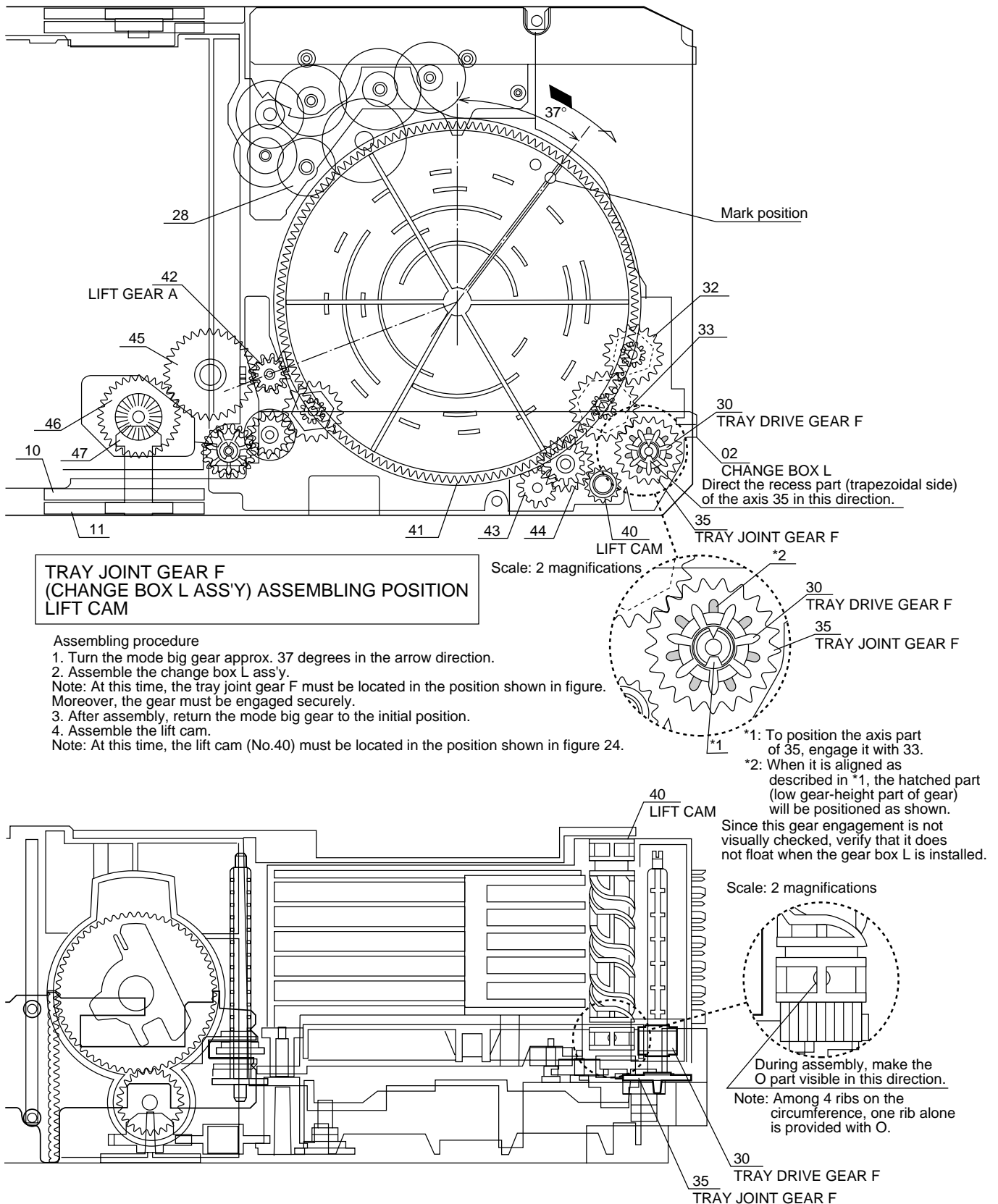


Figure 27

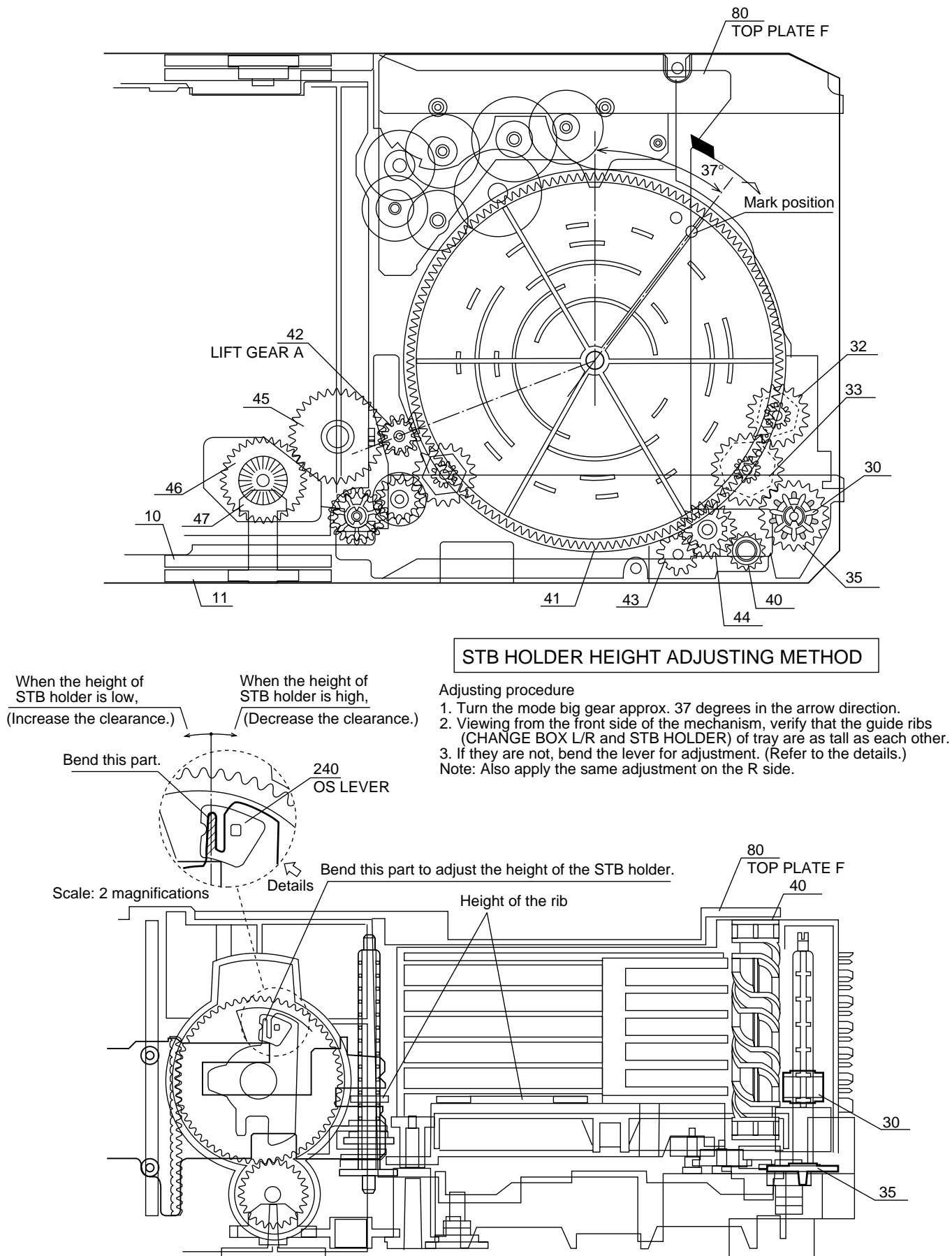


Figure 28

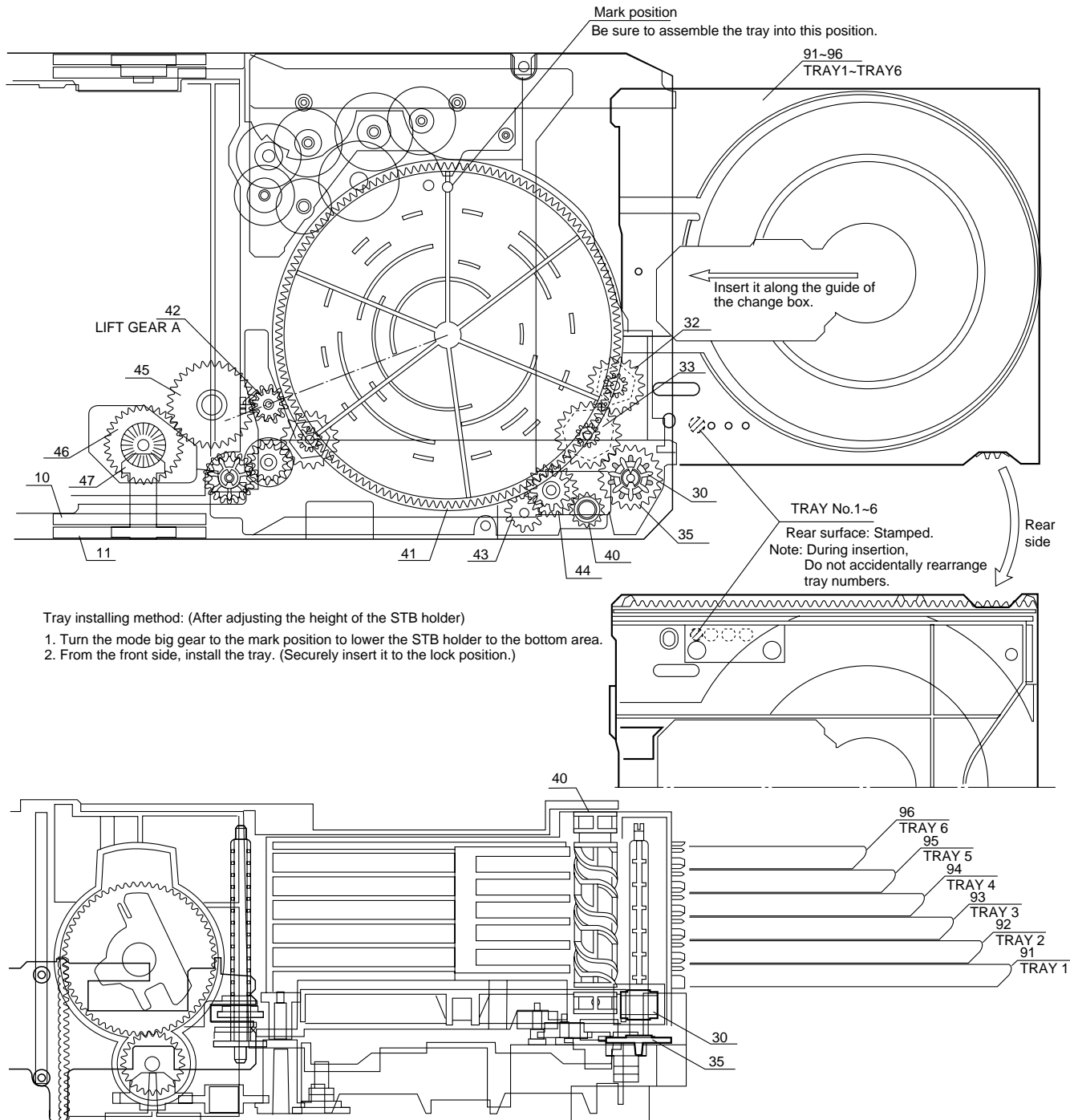


Figure 29

Measure to be taken when a disc cannot be removed due to a mechanism trouble

First, remove the mechanism unit section from the set, and check for the state of the disc.

(Remove the top plate R if necessary.)

<State of the disc>

- (1) When the disc is in the normal PLAY (chucking) position -> Try to eject the disc by turning the mode big gear/tray big gear manually.
* At this time, be sure to adjust the tray's position (height).
- (2) When the disc is in the normal STOCK position -> Try to eject the disc by turning the tray big gear manually.
* At this time, be sure to adjust the tray's position (height).
- (3) When the disc is not in the normal position -> The tray or disc is not in the normal position. (The tray or disc may catch somewhere.)



Remove the TOP PLATE F/DISC OB lever.
Unlock the tray lock lever and pull out the tray which is not caught.
Move the caught tray or disc and remove the disc.

In case of (1) and (2), the mechanism is normal (defective circuit parts, etc.). However, it may stop somewhere. This is the reason why you should try to turn the tray big gear first.

In case of (3), either of the big gears does not turn.

ADJUSTMENT

MECHANISM SECTION

• Driving Force Check

Torque Meter	Specified Value
Play: TW-2412	Over 80 g

• Torque Check

Torque Meter	Specified Value
Play: TW-2111	30 to 60 g.cm
Fast forward: TW-2231	60 to 120 g.cm
Rewind: TW-2231	60 to 120 g.cm

• Tape Speed

Test Tape	Adjusting Point	Specified Value	Instrument Connection
MTT-111	Variable resistor in motor.	3,000 ± 90 Hz	Speaker Terminal

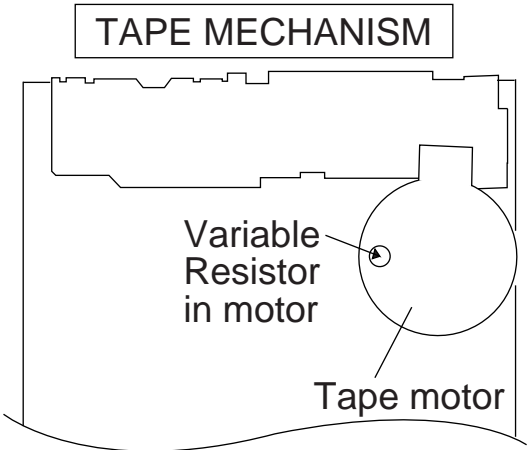


Figure 30-1 ADJUSTMENT POINT

Extension cable

	Type	Part No.
1.	33 Pin extension flat cable, 500mm	QCNWN6931AFZZ

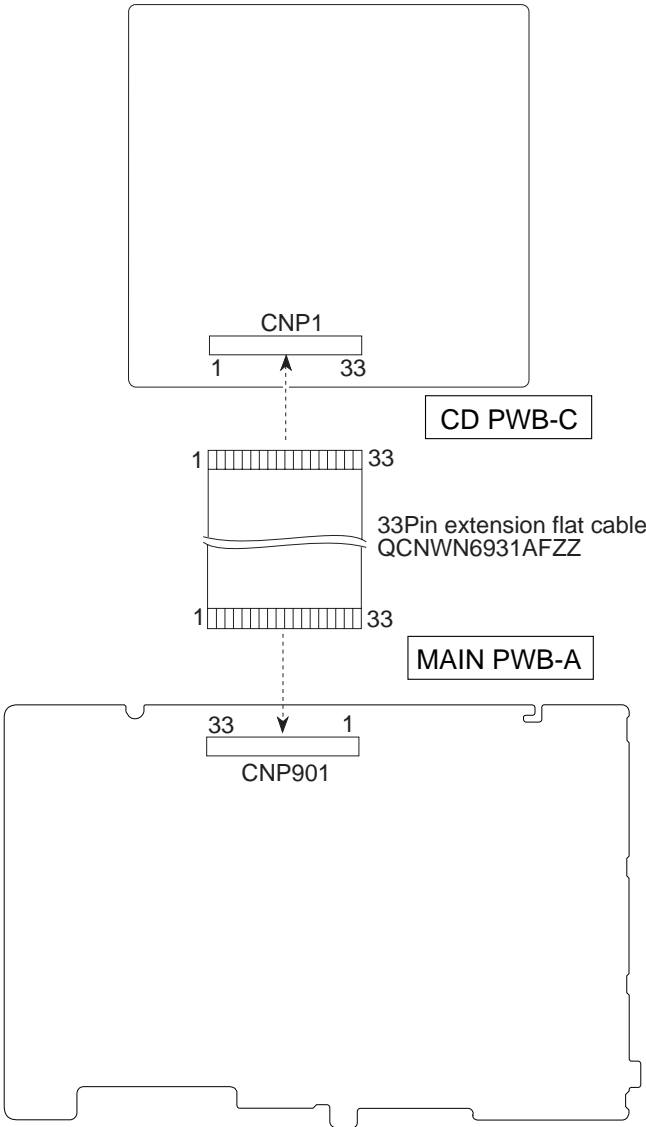


Figure 30-2 EXTENSION CABLE

TUNER SECTION

fL: Low-range frequency

fH: High-range frequency

CD-MD3000H

• AM IF/RF

Signal generator: 400 Hz, 30%, AM modulated

Test Stage	Frequency	Display	Setting/ Adjusting Parts	Instrument Connection
AM IF	450 kHz	1,620 kHz	T351	*1
AM Band Coverage	—	522 kHz	(fL): T306 1.1 ± 0.1 V	*2
AM Tracking	990 kHz	990 kHz	T302	*1

*1. Input: Antenna Output: Speaker Terminal

*2. Input: Antenna Output: TP301

• FM

Notes:

1: Description of the "FM IF Adjustment" is not carried on this Manual. It is because the IF coil in the FM front end section has been best adjusted in the factory so that its further adjustment is not needed at the field. When replacing the FM front end assembly, no adjustment is needed either.

2: The parts in the FM front end section are prepared in a complete unit, so you can't obtain each part individually.

• FM Mute Level (FM ST MODE)

Signal generator: 1 kHz, 40 kHz dev., FM modulated

Frequency	Display	Adjusting Parts	Instrument Connection
98.00 MHz (26 dBμV)	98.00 MHz	VR351 *1	Input: SO301 Output: Speaker Terminal

*1. Adjust so that an output signal appears.

CD-MD3000W

• AM IF/RF

Signal generator: 400 Hz, 30%, AM modulated

Test Stage	Frequency	Display	Setting/ Adjusting Parts	Instrument Connection
AM IF	450 kHz	1,602 kHz	T351	*1
AM Band Coverage	—	522 kHz	(fL): T306 1.1 ± 0.1 V	*2
AM Tracking	990 kHz	990 kHz	T302	*1

*1. Input: Antenna Output: Speaker Terminal

*2. Input: Antenna Output: TP301

• FM RF

Signal generator: 1 kHz, 75 kHz dev., FM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Parts	Instrument Connection
FM Band Coverage	—	87.50 MHz	(fL): T311 1.3 ± 50 mV	*1
FM RF	98.00 MHz (10~30 dB)	98.0 MHz	L312	*2

*1. Input: Antenna Output: TP301

*2. Input: Antenna Output: Speaker Terminal

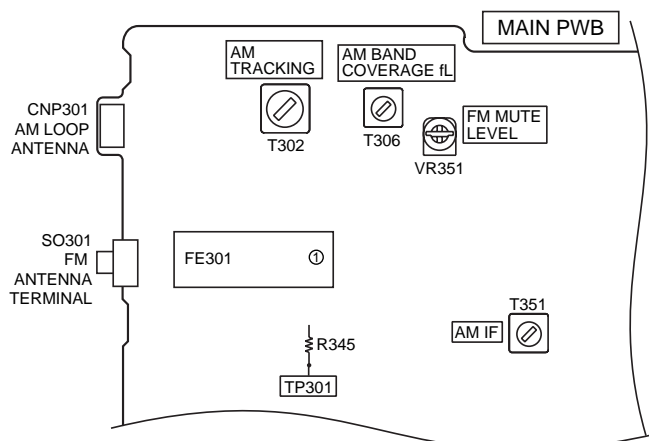
• FM Mute Level (FM ST MODE)

Signal generator: 1 kHz, 40 kHz dev., FM modulated

Frequency	Display	Adjusting Parts	Instrument Connection
98.00 MHz	98.00 MHz (26 dBμV)	VR351 *1	Input: CNP301 Output: Speaker Terminal

*1. Adjust so that an output signal appears.

CD-MD3000H



CD-MD3000W

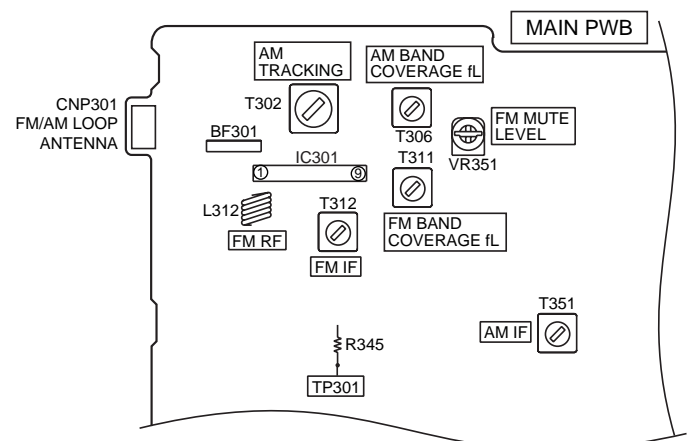


Figure 31 ADJUSTMENT POINTS

TEST MODE

Outline

While the unit is turned off, press the POWER key while holding down the VOLUME-DOWN and PANEL OP/CL keys to enter the test mode selection mode. Then, the unit is started, the panel is opened, and the microcomputer's version/destination/span is displayed. If the following data is entered from the keyboard while in the test mode selection mode, the unit directly enters the specified test mode. This operation is applied to the main unit's keys only.

Item	Type	Character display												Note
		Auxiliary display	1	2	3	4	5	6	7	8	9	10	Auxiliary display	
Version • Destination			V		*	•	*							Left adjust in the first line
					Number							Span		

Destination

Example: V1. 1_W:_9

In the destination display, a destination code (H/W/U/J) is displayed. For the span display, "9" means 9 kHz/50 kHz, and "10" means 10/100 kHz. All pictures will disappear except the characters.

By pressing the specific key, you can enter the test mode whose functions are as follows:

	Menu display	Shortcut Key	Model	
System	INITIAL	CD1 PLAY	ALL	Shipping status setting
	SOFT_RESET	CD2 PLAY	ALL	Soft rest
CD	CD_TEST	CD1 EJECT	ALL	CD test
Tuner	TUN_PRESET	CD4 EJECT	ALL	Tuner test frequency preset
	TUNER_TEST	CD5 EJECT	ALL	Tuner test
MD	MD_TEST	CD	ALL	MD test

Outline of Test Mode

	Name	Description
1	Shipping status setting	Sets up the unit for shipping.
2	Soft set setting	Initializes the unit.
3	CD test	Performs tests such as the CD mechanism test, hardware test, and constant setting test.
4	Tuner test frequency preset	Presets the test frequency.
5	Tuner preset clear setting	Clears all presets.
6	MD test	Setting MD micro computer to test mode.

Shipping status setting test mode

Purpose: To set up the unit for shipping.

Function: Initialize all functions.

Operation: All settings are initialized, "FINISH" is displayed as in the sample display, and data entry is prohibited including data to turn on or off the unit.

To exit the test mode

The unit returns to the normal operation through reset entry.

Table Character display for test mode 1

Item	Type	Character display												Note
		Auxiliary display	1	2	3	4	5	6	7	8	9	10	Auxiliary display	
Test mode name			I	N	I	T	I	A	L					
Set-Up Complete	Function		F	I	N	I	S	H						

In the destination display, a destination code is displayed. For the span display, "9" means 9 kHz/50 kHz, and "10" means 10/100 kHz.

2. Soft reset

Purpose: To initialize the unit.

Function: To initialize all functions.

Operation: "ALL CLEAR" is displayed, all functions are initialized, and the unit is turned on.

To exit the test mode

When the initialization through soft reset is complete, the unit is turned on.

Table Character display for test mode 2

Item	Type	Character display												Note
		Auxiliary display	1	2	3	4	5	6	7	8	9	10	Auxiliary display	
Reset operation display	Operation		A	L	L		C	L	E	A	R			

3. CD test mode (If this test mode is not activated, refer to CD troubleshooting on page 89.)

In the CD test mode, each step can be performed even if the LID-SW is off. However, if you cannot obtain a focus in step 3 or if other kind of error handling starts, you cannot proceed to the following steps. In error handling, press the POWER key to exit the test mode, or press the STOP key to prohibit operations other than returning to step 1.

(1) Step 1 mode

In the CD test mode, the following display appears, CD initialization is performed, and you are prompted for data.

Reset operation display / Operation

"CD_TEST"

After lighting up for one second

↓
"T1_____0:00"

The keys you can press here and the resulting operations are as follows:

"POWER" The test mode is turned off, the power is turned off, and the unit is placed in the normal stand-by mode.

"FWD" While holding down this key, the pickup moves outward after returning to the innermost track.

"REV" While holding down this key, the pickup moves inward after returning to the innermost track.

"PLAY" Jumps to step 2.

"STOP" Cancelled.

"TAPE REC" Jumps to step 5.

* While the pickup is moving to the innermost track in the initialization, none of the keys except POWER is accepted. When PU-IN SW ON cannot be detected in ten seconds, the unit stops the slide motor and shows the following error code. Then, you can press the POWER key to exit the test mode, or the STOP key to return to step 1. You cannot perform other operations.

"E--CD01"

(2) Step 2 mode

When the "PLAY" key is pressed in the above mode, the laser is turned on. At this time, another operation must not be performed.

Display "T2_____0:00"

The keys you can press here and the resulting operations are as follows:

"POWER" The test mode is turned off, the power is turned off, and the unit is placed in the normal stand-by mode.

"FWD" While holding down this key, the pickup is moved outward.

"REV" While holding down this key, the pickup is moved inward.

"PLAY" Jumps to step 2.

"STOP" Returns to step 1.

"TAPE REC" Jumps to step 5.

(3) Step 3 mode

Performs focus search and turns on the focus servo.

Focus search is repeated until it is brought into focus.

Display "T3_____0:00"

The keys you can press here and the resulting operations are as follows:

"POWER" The test mode is turned off, the power is turned off, and the unit is placed in the normal stand-by mode.

"FF/FWD" While holding down this key, the pickup is moved outward.

"REW/REV" While holding down this key, the pickup is moved inward.

"PLAY" Jumping to step 4 when a focus is obtained. Otherwise, data entry is prohibited.

"STOP" Returns to step 1.

"TAPE REC" Jumps to step 5.

* You should return to step 1 if it is out of focus after bringing it into focus.

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(4) Step 4 mode

Rotate a disc.

Displayed string: "T4_____0:00"

The clock display should always be "0:00".

The keys you can press here and the resulting operations are as follows:

"POWER" The test mode is turned off, the power is turned off, and the unit is placed in the normal stand-by mode.

"FF/FWD" While holding down this key, the pickup is moved outward.

"REW/REV" While holding down this key, the pickup is moved inward.

"PLAY" Jumps to step 5.

"STOP" Returns to step 1.

"TAPE REC" Jumps to step 5.

* You should return to step 1 if it is out of focus.

(5) Step 5 mode

Start playback. When the pickup reaches the outermost track, it does not stop. The LCD screen shows the replay time elapsed as in the normal CD playback.

Display "T5_____0:00"

The keys you can press here and the resulting operations are as follows:

"POWER" The test mode is turned off, the power is turned off, and the unit is placed in the normal stand-by mode.

"FWD" While holding down this key, the pickup is moved outward.

"REV" While holding down this key, the pickup is moved inward.

"PLAY" Canceled.

"STOP" Returns to step 1.

* You should return to step 1 if it is out of focus.

Notes:

- In the test mode, TOC IL is not performed.
- Only the keys for adjusting the volume are accepted except the keys described.

4. Tuner test frequency preset

Purpose: To preset a test frequency for an in-factory test.

Function: To preset each preset number to the band and frequency shown in Table 34 based on the initial setting for the destination.

Operation: To preset the band and frequency shown in the table below and turn the unit on with the following setting.

Function	Tuner
Band	FM monaural
Tuning mode	Preset call selection
Call preset number	Preset number 1 frequency
Band's last preset channel	See Table 34
X-BASS	Off
Preset equalizer	FLAT

For other functions, the value which was set when the unit was turned off last time is valid (last state).

To exit the test mode

After the frequency is preset and the set-up is done, the unit is turned on and normal operations start.

Table 34. TEST-TuSet preset frequencies

CH	BAND	CD-MD3000H	CD-MD3000W
1 %	FM	FM 87.5 MHz	FM 87.5 MHz
2		FM 108.0 MHz	FM 108.0 MHz
3		FM 90.0 MHz	FM 90.0 MHz
4		FM 106.0 MHz	FM 106.0 MHz
5		FM 98.0 MHz	FM 98.0 MHz
6 %	AM	AM 522 kHz	AM 531 kHz
7		AM 1620 kHz	AM 1602 kHz
8		AM 603 kHz	AM 603 kHz
9		AM 1404 kHz	AM 1404 kHz
10		AM 990 kHz	AM 990 kHz
11-40	_____	_____	_____

Unused channels are indicated with "—".
 "%" indicates the last channel for each band.
 All FM bands are preset to FM monaural.

MD SECTION

Enter the test mode, adjust or set as shown in the following table according to the repair operations.

Execution item required Repair operations	TEMP basic setting	Checking EEPROM setting	Writing the EEPROM setting	AUTO-YOBI adjustment	AUTO-adjustment	AUTO-FAB adjustment	Writing the EEPROM setting	Operation check	
	TEMP	EEPROM_SET	TEST-CANCEL	AUTO-YOBI	AUTO-ADJ	AUTO-FAB	TEST-CANCEL	TEST-PLAY	TEST-REC
PICK replacement	—	①	②	③	④	⑤	⑥	⑦	⑧
HEAD replacement	—	—	—	—	—	—	—	—	①
MECHANISM replacement	—	①	②	③	④	⑤	⑥	⑦	⑧
MAIN PWB assembly replacement	①	②	③	④	⑤	⑥	⑦	⑧	⑨
MD microcomputer replacement	—	①	—	—	—	②	③	④	⑤
MD LSI replacement	—	—		①	②	③	④	⑤	⑥
RF IC replacement	①	②	③	④	⑤	⑥	⑦	⑧	⑨
EEPROM IC replacement	①	②	③	④	⑤	⑥	⑦	⑧	⑨

number ① to ⑧ and ⑨ indicate the order of implementation.

" — " is an item that you don't have to execute.

The EEPROM writing result is shown at the end of the test mode
OK_EEPROM: "SET" and "YOBI COMPLETE" were written normally

WR_EEPROM: Although "SET" was written normally, it was not written in the "YOBI COMPLETE" state.

→ Perform "AUTO-YOBI" adjustment. After making a normal adjustment, write the preliminary adjustment into the EEPROM.

NG_EEPROM: "SET" could not be written.

→ Check the connection between the MD microcomputer and the EEPROM.

Extension Cable

	Type	Part No.
1	Extension PWB for servicing	RUNTK0532AFZZ
2	Extension Connector (2 Pin)	QCNWK0129AFZZ
3	Extension Cable (6 Pin)	QCNWK0130AFZZ
4	Extension Cable (5 Pin)	QCNWK0109AFZZ
5	Extension Cable (28 Pin)	QCNWK0108AFZZ

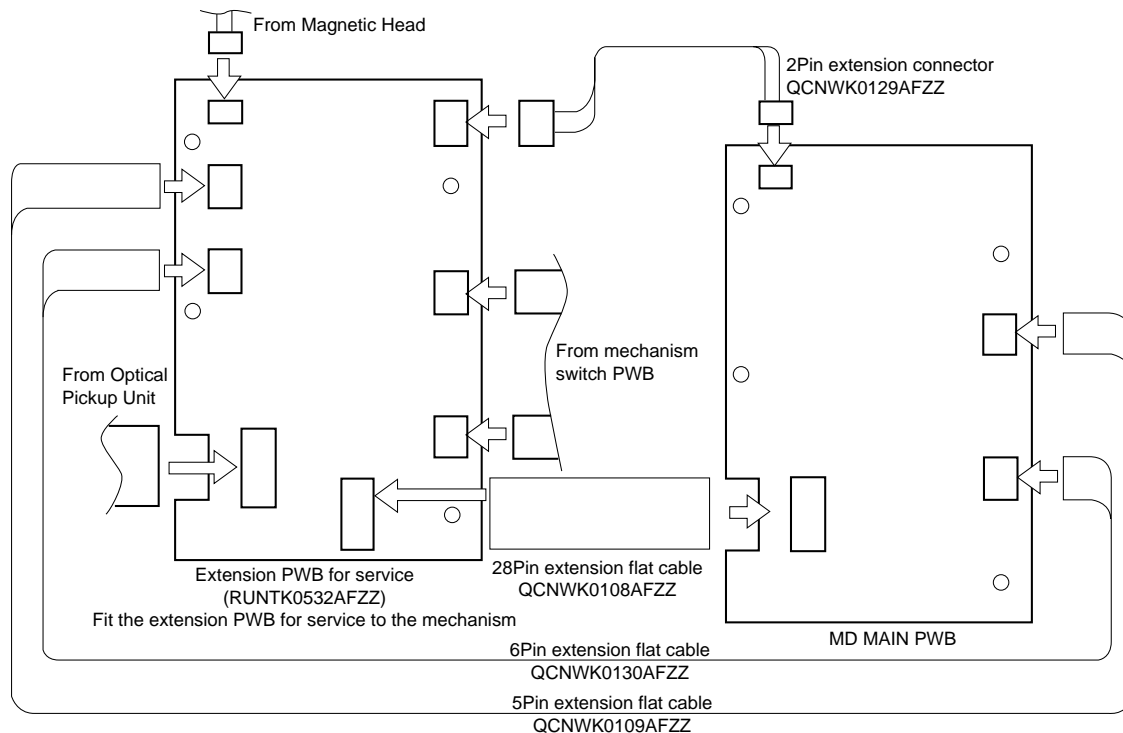


Figure 35

CD-MD3000H/CD-MD3000W

Operation/Input table for MD test mode 1

Button/Remoto control input	Main unit	Remoto control	Transmission command to MD	Pressing time	Function
[POWER]	O	O	—	Single press	Turning on/off the power of the set. When the power of the set is in the on state, it is turned off; when it is in the off state, it is turned on.
[EQ]	O	O	B 2 h	Single press	Test mode menu feed. To the servo adjustment mode (Feed of the menu for the adjustment and EEPROM)
[X-BASS]	O	O	B 4 h	Single press	Test mode menu feed. To the recording mode (Feed of the menu mainly for the continuous playback and continuous recording)
[PLAY]	O	O	F 2 h	Single press	Test mode menu feed. To other modes (Feed of the menu of the INNER mode, JUMP SELECT, etc.)
[REV PLAY]	O	O	A 8 h	Single press	Menu reverse feed in each mode. (Effective in each test mode)
[TAPE REC]	O	O	A 2 h	Single press	Decision of the menu select or start of its execution.
[STOP]	O	O	A 7 h	Single press	Cancellation of each test item and transition to the menu select of one higher order
[FF/CUE]	O	O	A A h	Single press Continuous press	1) Outer periphery feed of the slide motor (FWD). Continued outer periphery feed 2) Execution of JUMP 3) Address set value UP Others
[REW/REV]	O	O	A C h	Single press Continuous press	1) Inner periphery feed of the slide motor (REV). Continued inner periphery feed 2) Execution of JUMP 3) Address set value DOWN Others
[JOG UP]	O		F 3 h	—	1) Forced UNLOAD feed of a disc 2) Adjustment value +1
[JOG DOWN]	O		F 4 h	—	1) Forced LOAD feed of a disc 2) Adjustment value -1
[DISP/CHARACTER]	O	O	F 5 h	Single press	1) Laser switching in the EJECT mode 2) Display switching during continuous playback Others
[MENU]	O	O	1 F h + D 1 h	Single press	To the operation mode without auto adjustment
[LOADING SW]	O		B 5 h	—	Execution of normal loading operation
[MD EJECT]	O		B 3 h	Single press	Execution of normal eject operation

1. Preparation for adjustment Test disc

	Type	Test disc	Part No.
1	High reflection disc	TGYS1 (SONY) [for Playback]	RRCdT0101AFZZ
2	Low reflection disc	Recording minidisc SONY 80 minutes disc is recommended.(example:PRISM 80)	—
3	—	Head Adjusting transparent	RRCdT0103AFZZ
4	Low reflection disc	Pre-adjustment disc [TEAC Test MD]	88GMMD-318 or 88GMMD-213AS

2. Test Mode

Test mode setting method

1. "MD TEST 1" ENTER.

(State ① is changed to state ②.)

2. Insert the playback-only disc 1 (high reflection disc) or the recordable disc 2 (low reflection disc). (State is changed to ③.)

① tsm 1C○○e○○ : TEST MODE ○○ represents version of MD microcomputer.
STOP state

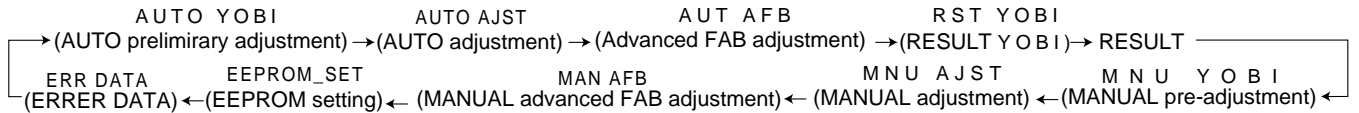
② EJECT

③ AUT AJST

(When the MD STOP button is pressed in the ③ state, the indication ① is restored. To restore ③ again, press the EQUALIZER button.)

Entering the specific mode

Whenever the EQUALIZER button is pressed, the mode is changed.



Cancel of test mode

To restore the usual state once reset.

*Before pressing the MENU button, be sure to perform the AUTO preliminary adjustment and the AUTO adjustment. Make sure that they return a "COMPLETE" result.

*When the data of EEPROM was changed or the preliminary adjustment was performed again, be sure to press the MENU button to write data in the EEPROM.

(Data is written in the EEPROM by pressing the MENU button.)

*When changing the EEPROM settings, write them into the EEPROM and then enter the test mode again. Perform the AUTO preliminary adjustment and the AUTO adjustment. Then, write those into the EEPROM.

• Test Mode

1. EJECT mode	<ul style="list-style-type: none"> • TEMP setting (of EEPROM setting) • CONTROL setting (of EEPROM setting) • Setting of laser power (record/playback power)
2. AUTO pre-adjustment mode	• Automatic pre-adjustment is performed.
3. AUTO adjustment mode	• Automatic adjustment is performed. (After adjustment the grating adjustment mode is set.)
<ul style="list-style-type: none"> • RESULT sub-mode • RESULT mode (final adjustment) • MANUAL pre-adjustment mode • MANUAL adjustment mode • MANUAL AFB adjustment mode • ERROR DATA 	• Therefore do not set this mode since it is not necessary for the service.
4. EEPROM setting mode	• Various coefficients of digital servo are changed manually.
5. TEST-PLAY mode	<ul style="list-style-type: none"> • Continuous playback from the specified address is performed. • C1 error rate measurement, ADIP error rate measurement.
6. TEST-REC mode	• Continuous recording from the specified address is performed.
7. INNER mode	• The position where the INNER switch is turned on is measured.

1. EJECT mode

Step No.	Setting Method	Remarks	Display
Step 1	Test mode EJECT state		[_ _ E J E C T _ _]
Step 2	Press the DISP/CHARACTER button.	Playback power output state	[p p w _ _ _ _ _]
Step 3	Press the DISP/CHARACTER button.	Rec power output state	[r p w _ _ _ _ _]
Step 4	Press the DISP/CHARACTER button.	Therefore do not set this mode since it is not necessary	[x p w _ _ _ _ _] for the service.
Step 5	Press the X-BASS button.	TEMP setting of EEPROM setting	[TEMP _ ○○ _ ○○]
Step 6	Press the PLAY button.	CONTROL setting of EEPROM setting	

	Step	Mode	Check items Pin 3 of IC1401	Result	Probable cause and remedy
MD TEST	1	Playback power output [ppw]	DC0.2V	To check 2	—
			DC1.5V	NG	Microcomputer may have recognized the PWB as for playback-only. Perform check 1.
	2	Recording power output [rpw]	DC1.8V	Check end	—
			Below DC1.5V	NG	Perform check 2.
		Cannot enter [rpw] mode	—	NG	Microcomputer may have recognized the PWB as for playback-only. Perform check 1.

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If "R/P WHICH?" appears, the mechanism and the PWB can be mismatched. Check whether the combination of the playing/recording PWB and mechanism are appropriate.

If "R/P WHICH?" still appears, eject the disc and check as follows.

Check 1: Check the pin 100 line of IC1401 for defective soldering. Check the pin 93 line of IC1401 for short-circuit and defective soldering (Also check the SW PWB).

Check 2: Check the pin 3 line of IC1401 for defective soldering and short-circuit with other patterns. Check that the pickup laser is not broken.

Confirmation of pickup laser power

It is possible to confirm in the record/playback mode with the aid of laser power meter. However, since the laser power meter measurement is characterized with dispersion, obtained data are used only for confirmation.

Reference data (at room temperature 25°C)

Playback: 0.72±0.1 mW

Record: 5.5±0.5 mW

Note: Never see directly the laser light. Otherwise your eyes are injured.

2. AUTO pre-adjustment mode (Low reflection disc only)

With the pre-adjustment disc (MMD-318)

Step No.	Setting Method	Remarks	Display
Step 1	Test mode STOP state		[t s m○○○○ e○○]
Step 2	Press once the EQUALIZER button.	AUTO adjustment menu	[A U T O _ A J S T _]
Step 3	Press once the REV PLAY button.	AUTO pre-adjustment menu	[_ A U T _ Y O B I _]
Step 4	Press once the TAPE REC button. End of adjustment	• During automatic adjustment *** changes as follows. HAo→•••••→LAO If adjustment is OK, Step 5. If adjustment is NG, Step 6.	[*** : _ _ _ _ _]
Step 5	Grating adjustment, adjustment value output Press once the MD STOP button.	STEP 3 AUTO pre-adjustment menu	[_ C O M P L E T E _]
Step 6	Adjustment value output Press once the MD STOP button.	STEP 3 AUTO pre-adjustment menu	[C a n ' t _ A D J .]

• *** : Adjustment name

3. AUTO adjustment mode

Step No.	Setting Method	Remarks	Display
Step 1	Test mode STOP state	The AUTO preliminary adjustment should have been completed.	[t s m○○○○ e○○]
Step 2	Press once the EQUALIZER button.	AUTO adjustment menu	[A U T O _ A J S T _]
Step 3	Press once the TAPE REC button. End of adjustment	The slide moves to the innermost periphery, and automatic adjustment is started. • In case of high reflection disc *** changes as follows. PEG→HAG • In case of low reflection disc *** changes as follows. PEG→LAG If adjustment is OK, Step 4. If adjustment is NG, Step 8.	[*** : _ _ _ _ _]
Step 4	Adjustment value output Press the TAPE REC button. Press the MD STOP button.	For grating adjustment STEP 5 STEP 2 AUTO adjustment	[_ C O M P L E T E _]
Step 5	Continuous playback (pit section) Continuous playback (groove section)	Confirmation of CI error	[s□□□□ c○○○○] [a□□□□ c○○○○]
Step 6	Press the DISP/CHARACTER button. Press the MD STOP button.	Conformation of ADIP error (High reflection disc STEP 7) STEP 2 AUTO adjustment menu	[a□□□□ a○○○○]
Step 7	Continuous playback (pit section) Continuous playback (groove section)	Confirmation of Jitter	[s□□□□ j○○○○] [a□□□□ j○○○○]
Step 8	Adjustment value output Press the MD STOP button.	STEP 2 AUTO adjustment menu	[C a n ' t _ A D J .]

• *** : Adjustment name, ○○ : Measurement value, □□□□ : Address

4. AUTO AFB adjustment mode (Low reflection disc only)

Step No.	Setting Method	Remarks	Display
Step 1	Test mode STOP state	The AUTO preliminary adjustment should have been completed.	[t s m○○○○ e○○]
Step 2	Press the EQUALIZER button two times.	AUTO FAB adjustment menu	[_ A U T _ A F B _ _]
Step 3	Press the TAPE REC button.	The slide moves to the innermost periphery, and automatic "PB_DISC_ _ _" (HIGH reflection DISC)	[F A B ○○ _ ΔΔΔΔ]
Step 4	Adjustment value output Press the MD STOP button.	STEP 2 AUTO adjustment	[○○ _ ΔΔΔΔ _ _ _]

• ○○ , ΔΔΔΔ , □□ : Measurement value

5. EEPROM setting mode

A) Focus setting

Step No.	Setting Method	Display
Step 1	Test mode STOP state	[t s m ○ ○ ○ ○ e ○ ○]
Step 2	Press the EQUALIZER button eight times.	[E E P R O M _ S E T]
Step 3	Press the TAPE REC button.	[_ _ F o c u s _ _ _]
Step 4	Press the TAPE REC button.	[F G _ _ _ _ _ ◆◆]
Step 5	Press the EQUALIZER button.	[F F 0 _ _ _ _ ◆◆]
Step 6	Press the EQUALIZER button.	[F F 1 _ _ _ _ ◆◆]
Step 7	Press the EQUALIZER button.	[F F 2 _ _ _ _ ◆◆]
Step 8	Press the EQUALIZER button.	[F Z H L E V _ _ ◆◆]
Step 9	Press the EQUALIZER button.	[F O K L E V h _ ◆◆]
Step 10	Press the EQUALIZER button.	[F O K L E V L _ ◆◆]
Step 11	Press the EQUALIZER button.	[F O S T n _ _ ◆◆]
Step 12	Press the EQUALIZER button.	[D S C J G _ _ _ ◆◆]

◆◆ : Setting value

B) Spin setting

Step No.	Setting Method	Display
Step 1	Test mode STOP state	[t s m ○ ○ ○ ○ e ○ ○]
Step 2	Press the EQUALIZER button eight times.	[E E P R O M _ S E T]
Step 3	Press the TAPE REC button.	[_ _ F o c u s _ _ _]
Step 4	Press the EQUALIZER button.	[_ S p i n d l e _ _]
Step 5	Press the TAPE REC button.	[S P G _ _ _ _ ◆◆]
Step 6	Press the EQUALIZER button.	[S P G _ i n _ _ ◆◆]
Step 7	Press the EQUALIZER button.	[S P G _ m i d _ ◆◆]
Step 8	Press the EQUALIZER button.	[S P G _ o u t _ ◆◆]
Step 9	Press the EQUALIZER button.	[S P 1 _ _ _ _ ◆◆]
Step 10	Press the EQUALIZER button.	[S P 2 _ _ _ _ ◆◆]
Step 11	Press the EQUALIZER button.	[S P 3 _ _ _ _ ◆◆]
Step 12	Press the EQUALIZER button.	[S P 4 _ _ _ _ ◆◆]
Step 13	Press the EQUALIZER button.	[S P 5 _ _ _ _ ◆◆]
Step 14	Press the EQUALIZER button.	[S P D L I M _ _ ◆◆]
Step 15	Press the EQUALIZER button.	[S P K L E V m _ ◆◆]

◆◆ : Setting value

C) Tracking setting

Step No.	Setting Method	Display
Step 1	Test mode STOP state	[t s m ○ ○ ○ ○ e ○ ○]
Step 2	Press the EQUALIZER button eight times.	[E E P R O M _ S E T]
Step 3	Press the TAPE REC button.	[_ _ F o c u s _ _ _]
Step 4	Press the EQUALIZER button two times.	[_ T r a c k i n g _]
Step 5	Press the TAPE REC button.	[T G _ _ _ _ _ ◆◆]
Step 6	Press the EQUALIZER button.	[T F 0 _ _ _ _ ◆◆]
Step 7	Press the EQUALIZER button.	[T F 1 _ _ _ _ ◆◆]
Step 8	Press the EQUALIZER button.	[T F 2 _ _ _ _ ◆◆]
Step 9	Press the EQUALIZER button.	[T F 3 _ _ _ _ ◆◆]
Step 10	Press the EQUALIZER button.	[S V C N T 4 _ _ ◆◆]
Step 11	Press the EQUALIZER button.	[T R B L V o _ _ ◆◆]
Step 12	Press the EQUALIZER button.	[T R B L V t _ _ ◆◆]
Step 13	Press the EQUALIZER button.	[T R K L V o _ _ ◆◆]
Step 14	Press the EQUALIZER button.	[T R K L V t _ _ ◆◆]
Step 15	Press the EQUALIZER button.	[T D P W o _ _ _ ◆◆]
Step 16	Press the EQUALIZER button.	[T D P W t _ _ _ ◆◆]
Step 17	Press the EQUALIZER button.	[S L C T o _ _ _ ◆◆]
Step 18	Press the EQUALIZER button.	[S L C T t _ _ _ ◆◆]

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C) Tracking setting

Step No.	Setting Method	Display
Step 19	Press the EQUALIZER button.	[S L C T m _ _ _ ◆◆]
Step 20	Press the EQUALIZER button.	[T C R S C 1 P _ ◆◆]
Step 21	Press the EQUALIZER button.	[T C R S C 0 h _ ◆◆]
Step 22	Press the EQUALIZER button.	[T C R S C 0 L _ ◆◆]
Step 23	Press the EQUALIZER button.	[T C R S C H h _ ◆◆]
Step 24	Press the EQUALIZER button.	[T C R S C H L _ ◆◆]
Step 25	Press the EQUALIZER button.	[C O T L V p _ _ ◆◆]
Step 26	Press the EQUALIZER button.	[C O T L V r _ _ ◆◆]
Step 27	Press the EQUALIZER button.	[J P i n t _ _ _ ◆◆]
Step 28	Press the EQUALIZER button.	[K I K 1 0 _ _ _ ◆◆]

◆◆ : Setting value

D) Sled setting

Step No.	Setting Method	Display
Step 1	Test mode STOP state	[t s m ○ ○ ○ ○ e ○ ○]
Step 2	Press the EQUALIZER button eight times.	[E E P R O M _ S E T]
Step 3	Press the TAPE REC button.	[_ _ F o c u s _ _ _]
Step 4	Press the EQUALIZER button three times.	[_ _ _ S l e d _ _ _]
Step 5	Press the TAPE REC button.	[S L G _ _ _ _ _ ◆◆]
Step 6	Press the EQUALIZER button.	[S L 2 _ _ _ _ _ ◆◆]
Step 7	Press the EQUALIZER button.	[S L D L I M _ _ ◆◆]
Step 8	Press the EQUALIZER button.	[S L D L E V _ _ ◆◆]
Step 9	Press the EQUALIZER button.	[S L K L V k _ _ ◆◆]
Step 10	Press the EQUALIZER button.	[S L K L V t _ _ ◆◆]
Step 11	Press the EQUALIZER button.	[S L K L V m _ _ ◆◆]
Step 12	Press the EQUALIZER button.	[S L B K M _ _ _ ◆◆]
Step 13	Press the EQUALIZER button.	[S L K r i o _ _ ◆◆]
Step 14	Press the EQUALIZER button.	[S L K r o i _ _ ◆◆]
Step 15	Press the EQUALIZER button.	[S L K l i o _ _ ◆◆]
Step 16	Press the EQUALIZER button.	[S L K l o i _ _ ◆◆]

◆◆ : Setting value

E) TEMP setting

Step No.	Setting Method	Display
Step 1	EJECT state	[_ _ E J E C T _ _ _]
Step 2	Press the X-BASS button.	[T E M P _ ○ ○ _ ◆◆]

◆◆ : Setting value, ○○ : Measurement value

F) CONTROL setting

Step No.	Setting Method	Display
Step 1	Test mode STOP state	[t s m ○ ○ ○ ○ e ○ ○]
Step 2	Press the EQUALIZER button eight times.	[E E P R O M _ S E T]
Step 3	Press the TAPE REC button.	[_ _ F o c u s _ _ _]
Step 4	Press the EQUALIZER button five times.	[_ C o n t r o l _ _]
Step 5	Press the TAPE REC button.	[C O N T R L 1 _ ◆◆]
Step 6	Press the EQUALIZER button.	[C O N T R L 2 _ ◆◆]
Step 7	Press the EQUALIZER button.	[A D J T T M _ _ ◆◆]
Step 8	Press the EQUALIZER button.	[H D E Q A D _ _ ◆◆]
Step 9	Press the EQUALIZER button.	[L D E Q A D _ _ ◆◆]
Step 10	Press the EQUALIZER button.	[G D E Q A D _ _ ◆◆]
Step 11	Press the EQUALIZER button.	[H D E Q B C _ _ ◆◆]
Step 12	Press the EQUALIZER button.	[L D E Q B C _ _ ◆◆]
Step 13	Press the EQUALIZER button.	[G D E Q B C _ _ ◆◆]
Step 14	Press the EQUALIZER button.	[H A L S G _ _ _ ◆◆]
Step 15	Press the EQUALIZER button.	[L A L S G _ _ _ ◆◆]

Step No.	Setting Method	Display
Step 16	Press the EQUALIZER button.	[G A L S G _ _ _ ◆◆]
Step 17	Press the EQUALIZER button.	[H A L S O F S _ ◆◆]
Step 18	Press the EQUALIZER button.	[L A L S O F S _ ◆◆]
Step 19	Press the EQUALIZER button.	[G A L S O F S _ ◆◆]

◆◆ : Setting value

G) ADJUST setting

Step No.	Setting Method	Display
Step 1	Test mode STOP state	[t s m ○ ○ ○ ○ e ○ ○]
Step 2	Press the EQUALIZER button eight times.	[E E P R O M _ S E T]
Step 3	Press the TAPE REC button.	[_ _ F o c u s _ _ _]
Step 4	Press the EQUALIZER button six times.	[A D J S E T _ _ _ _]
Step 5	Press the TAPE REC button.	[C O K _ _ _ _ _ ◆◆]
Step 6	Press the EQUALIZER button.	[F A T _ _ _ _ _ ◆◆]
Step 7	Press the EQUALIZER button.	[T A T _ _ _ _ _ ◆◆]
Step 8	Press the EQUALIZER button.	[C A T _ _ _ _ _ ◆◆]
Step 9	Press the EQUALIZER button.	[F A B _ _ _ _ _ ◆◆]
Step 10	Press the EQUALIZER button.	[S T R _ _ _ _ _ ◆◆]
Step 11	Press the EQUALIZER button.	[S F S _ _ _ _ _ ◆◆]
Step 12	Press the EQUALIZER button.	[S T C _ _ _ _ _ ◆◆]

◆◆ : Setting value

6. TEST-PLAY mode

(For confirmation of the playback ability at the named address.)

Step No.	Setting Method	Remarks	Display
Step 1	Test mode STOP state	The AUTO preliminary adjustment should have been completed.	[t s m ○ ○ ○ ○ e ○ ○]
Step 2	Press the X-BASS button.	TEST-PLAY menu	[T E S T _ P L A Y _]
Step 3	Press once the DISP/CHARACTER button. Press once the TAPE REC button.	ADDRESS setting (Target address initial value is indicated)	[A D R E S _ 0 0 3 2]
Step 4	Continuous playback (pit section) Continuous playback (groove section)	(Address + C1 error indication) (Address + C1 error indication)	[s □ □ □ □ c ○ ○ ○ ○] [a □ □ □ □ c ○ ○ ○ ○]
Step 5	Press once the DISP/CHARACTER button. Continuous playback (groove section)	(Address + ADIP error indication) (HIGH reflection STEP 6)	[a □ □ □ □ a ○ ○ ○ ○]
Step 6	Continuous playback (pit section) Continuous playback (groove section)	Address + Jitter	[s □ □ □ □ j ○ ○ ○ ○] [a □ □ □ □ j ○ ○ ○ ○]
Step 7	Press once the MD STOP button.	TEST-PLAY menu	[T E S T _ P L A Y _]

• Whenever the X-BASS button is pressed in the address setting mode, the address changes as follows.

0 0 3 2 → 0 3 C 0 → 0 7 0 0 → 0 8 A 0 → 0 9 5 0 → 0 0 3 2 →

7. TEST-REC mode

With recording mini disk (For confirmation of the playback ability at the named address.)

Step No.	Setting Method	Remarks	Display
Step 1	Test mode STOP state	The AUTO preliminary adjustment should have been completed.	[t s m ○ ○ ○ ○ e ○ ○]
Step 2	Press twice the X-BASS button.	TEST-REC menu	[T E S T _ R E C _ _]
Step 3	Press once the DISP/CHARACTER button.	ADDERS setting (indication of address initial value)	[a 0 0 3 2 _ p w ▽ ▽]
Step 4	Press once the TAPE REC button.	Continuous recording	[a □ □ □ □ _ p w ▽ ▽]
Step 5	Press once the MD STOP button.	TEST-REC menu	[T E S T _ R E C _ _]

• Whenever the X-BASS button is pressed in the address setting mode, the address changes as follows.

0 0 3 2 → 0 3 C 0 → 0 7 0 0 → 0 8 A 0 → 0 9 5 0 → 0 0 3 2 →

8. INNER mode

Step No.	Setting Method	Remarks	Display
Step 1	Test mode STOP state		[t s m ○ ○ ○ ○ e ○ ○]
Step 2	Press the MD PLAY button.	INNER menu	[_ _ I N N E R _ _]
Step 3	Press once the TAPE REC button.	INNER switch position measurement (SUBQ address and C1 error are also indicated.)	[s □ □ □ □ c ○ ○ ○ ○]
Step 4	Press once the MD STOP button.	INNER menu	[_ _ I N N E R _ _]

□ □ □ □ : Address

CD-MD3000H/CD-MD3000W

● Lead-in switch position measurement mode

Insert the high reflection test disk TGYS1.

Note: Adjust the lead-in switch position within the range of FF85 - FFD2.

1. Measure the lead-in switch position. Loosen the screw (A1) x 1 pc. which fixes the mechanism switch PWB.
2. When the lead-in switch is located FF85 or less, tighten the screw while pressing the PWB in the direction of the arrow A. When FFD2 or more, to direction B. Measure the lead-in switch position again. After position adjustment is completed, fix the PWB with the screw (A1) x 1 pc.(shown in Figure 42-1)

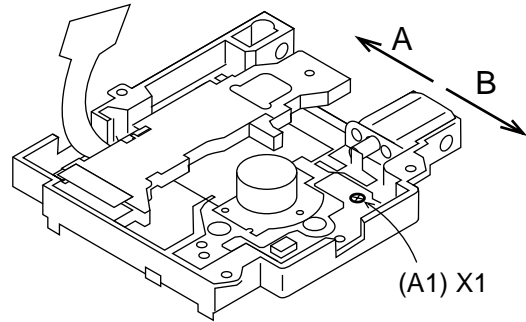


Figure 42-1

● Magnetic head mounting position check

- Check the mounting position whenever the magnetic head and the optical pickup are replaced.
 - Move the optical pickup to the center to adjust the position easily.
1. Set the adjusting transparent disc 3.
 2. Press down the magnetic head up shift arm by hand to raise the magnetic head.
 3. View the set from above to check whether the magnetic head aligns with the optical pickup objective lens.
 4. Check that the magnetic head moves up and down smoothly. (shown in Figure 42-2)

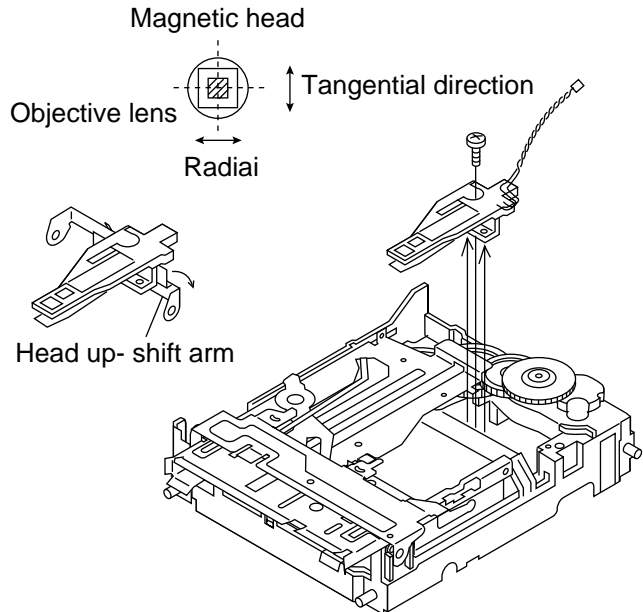


Figure 42-2

● Rotating the loading motor forcibly

The loading motor can be rotated forcibly by rotating the JOG UP/DOWN knob while STOP or EJECT in the test mode appears on the display.

● Mechanism Adjustment

1. Optical pickup grating inspecting method

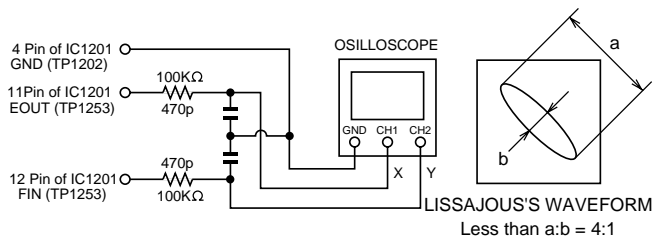


Figure 42-3 Optical Pickup Grating Deviation Measuring Method

After auto adjustment (COMPLETE appears) in the test mode (auto) using the high reflection MD disc TGYS1, adjust the Lissajou's waveform (x-y) of EOUT to FOUT.

1. Slightly loosen the 3 screws of the spindle motor, adjust while observing the Lissajou's waveform.
2. After adjustment, tighten screws 1, 2, and 3 in numerical order. (See Fig. 42-4.)

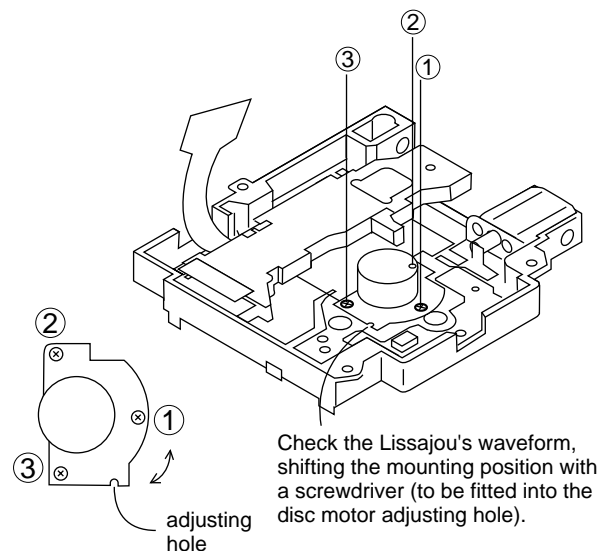


Figure 42-4

EEPROM WRITING PROCEDURE

● EEPROM (IC1402) writing procedure

1. Method for setting the reference temperature value

(This setting should be performed quickly at a room temperature, between 21°C and 29°C when the PWB is not hot.)

- (1) When replacing the EEPROM, wait until it has cooled down.
- (2) Connect the main unit using the single MD main PWB.
- (3) Enter the test mode as shown on page 38.

"EJECT"

- (4) Press the X-BASS button.

"TEMP ○○ ◆◆"

○○: Measured temperature, ◆◆: Temperature setting

- (5) Find the temperature correction value for the current ambient temperature on the following table. Adjust the temperature correction value using the JOG UP/DOWN knob.

Ambient temperature	correction
+ 21.0 °C ~ + 23.2 °C	-1 H
+ 23.3 °C ~ + 26.8 °C	± 0 H
+ 26.9 °C ~ + 29.0 °C	+1 H

An example: When ambient temperature is 22°C and measured temperature is 7AH

Temperature setting = 7A H - 01 H
= 79 H

* When the measured temperature fluctuates between two values, take lower one (if temperature fluctuates between 7AH and 79H, take 79H).

- (6) Press the MENU button and write the temperature setting into the EEPROM.

2. Method for making settings other than the reference temperature

- (1) Install the MD main PWB in the mechanism, and connect it to the main unit.
- (2) Enter the test mode as shown on page 38, and insert a disc.
- (3) Press the EQUALIZER button seven times.
- (4) Set the value according to the EEPROM DATA LIST using the JOG knob.
- (5) Press the MENE button, and the settings will be written into the EEPROM.
- (6) Enter the test mode again, perform an "AUTO YOBI adjustment", and write the results into the EEPROM.

EEPROM DATA LIST (Version : 02)

Focus setting

Item indication	Setting
F G ○○	B 1 H
F F 0 ○○	1 0 H
F F 1 ○○	7 0 H
F F 2 ○○	E 0 H
F Z H L E V ○○	E D H
F O K L E V h ○○	0 7 H
F O K L E V L ○○	0 9 H
F O S T n ○○	2 C H
D S C J G ○○	1 4 H

Spin setting

Item indication	Setting
S P G ○○	1 0 H
S P G — i n ○○	5 C H
S P G — m i d ○○	4 8 H
S P G — o u t ○○	3 8 H
S P 1 ○○	1 0 H
S P 2 ○○	9 3 H
S P 3 ○○	E D H
S P 4 ○○	E E H
S P 5 ○○	2 0 H
S P D L I M ○○	6 4 H
S P K L E V m ○○	1 5 H

Tracking setting

Item indication	Setting
T G ○○	6 B H
T F 0 ○○	1 0 H
T F 1 ○○	6 B H
T F 2 ○○	F 0 H
F T 3 ○○	0 8 H
S V C N T 4 ○○	0 1 H
T R B L V o ○○	6 8 H
T R B L V t ○○	5 0 H
T R K L V o ○○	6 0 H
T R K L V t ○○	2 E H
T D P W o ○○	6 7 H
T D P W t ○○	2 1 H
S L C T o ○○	0 0 H
S L C T t ○○	5 0 H
S L C T m ○○	5 3 H
T C R S C I P ○○	1 6 H
T C R S C 0 h ○○	0 0 H
T C R S C 0 L ○○	F A H
T C R S C H h ○○	0 2 H
T C R S C H L ○○	0 2 H
C O T L V P ○○	0 5 H
C O T L V r ○○	1 5 H
J P i n t ○○	0 0 H
K I K 1 0 ○○	6 4 H

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Sled setting

Item indication	Setting
SLG ○○	3 E H
SL2 ○○	1 0 H
SLDLIM ○○	7 F H
SLDLEV ○○	1 2 H
SLKLVk ○○	5 5 H
SLKLVt ○○	2 E H
SLKLVm ○○	5 5 H
SLBKm ○○	0 8 H
SLKrio ○○	6 0 H
SLKroi ○○	6 8 H
SLKlio ○○	6 8 H
SLKlio ○○	6 0 H

ADJUST setting

Item indication	Setting
COK ○○	5 8 H
FAT ○○	C 0 H
TAT ○○	3 E H
CAT ○○	4 0 H
FAB ○○	*(6 4 H)
STR ○○	0 B H
SFS ○○	0 D H
STC ○○	0 D H

Note: * A change is made after AFB adjustment.

Control setting

Item indication	Setting
CONTRL1 ○○	0 8 H
CONTRL2 ○○	0 2 H
ADJT TM ○○	1 4 H
HDEQAD ○○	9 2 H
LDEQAD ○○	8 E H
GDEQAD ○○	9 1 H
MDEQBC ○○	8 C H
LDEQBC ○○	8 F H
GDEQBC ○○	8 A H
HALSG ○○	1 1 H
LALSG ○○	1 1 H
GALSG ○○	1 1 H
HALS OFS ○○	F C H
LALS OFS ○○	0 0 H
GALS OFS ○○	0 0 H
AJST ○○	0 0 H

ERROR MESSAGE LIST

CD error messages

Errors	Messages	Remarks
Pickup mechanism error	E-CD01	Slide motor operation error (PU-IN SW detection NG)
Tray error	E-CD20	Tray open/close operation error
Changer mechanism error	E-CD10	Changer mechanism operation error

TUNER error messages

Errors	Messages	Remarks
Relation to RDS EON reception impossible	WEAK SIG	When switching to an EON station, it cannot be received due to weak signal.
PLL UN LOCK	Frequency indicator flashing	Reception error or PLL control error

TAPE error messages

Errors	Messages	Remarks
You tried to record on a tape removing the recording prevention tabs.	'PROTECTED'	
TAPE mechanism error	E-TA01	Mechanism initialize abnormal end



MD error messages

Errors	Messages	Remarks
Communication with MD is impossible.	'MD?'	
There are no tracks on the disc.	'BLANK MD'	
When digitally recording from a copy-inhibited source.	'CAN' T COPY'	
Error occurs during edit operation.	'CAN' T EDIT'	
Audio memory over during recording SD write error occurs continuously.	'CAN' T REC'	
Focus pull-in process time over. Track search process timer over.	'CANT READ'	* indicates detail factor. f: Focus error r: READ ERR s: Search time over w: SD write time over
There is no free area on the disc when recording.	'DISC FULL'	
EEPROM readout checksum error.	'E-MD80'	
Loading mechanism operation error.	'E-MD**'	** indicates operation state. (Error code) 1*: Recording head up 2*: Recording head down f*: EJECT If it occurs continuously, it is described in the operation manual that repair should be referred to a dealer.
The number of characters for the name information exceeds 100.	'NAME FULL'	
It is decided that there is no MD.	'MD NO DISC'	
A track other than audio is played back.	'NOT AUDIO'	Displayed when playback sound is not output.
You tried to record on or edit a playback-only MD.	'PLAY MD'	
You tried to record on or edit a recordable MD which is write-protected.	'PROTECTED'	
High temperature is detected.	'TEMP OVER'	
P-TOC information readout is not completed.	'CANT READ*'	* indicates detail factor. a: Servo adjustment error f: Focus error s: Search time over r: READ ERR
There is no space for slot during recording/editing	'TOC FULL'	
There is no space for slot when inputting the name information.	'TOC FULL*'	* is a sector number.
It is judged abnormal during UTOC write test.	'E-MD41'	** is an error number.
Signal is not synchronized when recording using the digital input	'NO SIGNAL'	
U-TOC information readout is not completed.	'CAN' T READ*'	* indicates detail factor. u: UTOC READ ERR
Abnormal data DISC detection.	TOC FORM **	* indicates detail factor. L*: Loop a_: Address error t_: FTNO>LTNO
UTOC write is not normally completed.	'CANT WRITE'	
It is detected that it is a disc other than audio MD.	'? DISC'	
The track to be edited is in the write protection mode.	'TR. Protect'	

NOTES ON SCHEMATIC DIAGRAM

- Resistor:
To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with "Fusible" is a fuse type.
- Capacitor:
To indicate the unit of capacitor, a symbol P is used: this symbol P means pico-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression "capacitance/withstand voltage" is used.
(CH), (TH), (RH), (UJ): Temperature compensation
(ML): Mylar type
(P.P.): Polypropylene type
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.

REF. NO	DESCRIPTION	POSITION
NSW1	PICKUP IN	ON—OFF
SO801	VOLTAGE SELECTOR (CD-MD3000W Only)	230-240V
SW701	POWER	ON—OFF
SW705	OPEN/CLOSE	ON—OFF
SW710	PANEL OPEN/CLOSE	ON—OFF
SW711	VOLUME DOWN	ON—OFF
SW712	VOLUME UP	ON—OFF
SW720	CD 1 EJECT	ON—OFF
SW721	CD 2 EJECT	ON—OFF
SW722	CD 3 EJECT	ON—OFF
SW723	CD 4 EJECT	ON—OFF
SW724	CD 5 EJECT	ON—OFF
SW725	CD 6 EJECT	ON—OFF
SW730	CD 1 PLAY	ON—OFF
SW731	CD 2 PLAY	ON—OFF
SW732	CD 3 PLAY	ON—OFF
SW733	CD 4 PLAY	ON—OFF
SW734	CD 5 PLAY	ON—OFF
SW735	CD 6 PLAY	ON—OFF
SW750	HIGH/NORMAL	ON—OFF
SW751	RECORD/MODE	ON—OFF
SW752	AUTO MARKER	ON—OFF
SW753	FAST REVERSE	ON—OFF
SW754	FAST FORWARD	ON—OFF
SW755	TAPE RECORD	ON—OFF
SW756	PLAY/PAUSE	ON—OFF
SW757	STOP	ON—OFF
SW758	PLAY	ON—OFF
SW760	AUX	ON—OFF
SW761	TAPE	ON—OFF
SW762	TUNER	ON—OFF

- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
 1. In the tuner section,
() indicates AM
< > indicates FM stereo
 2. In the main section, a tape is being played back.
 3. In the deck section, a tape is being played back.
() indicates the record state.
 4. In the power section, a tape is being played back.
 5. In the CD section, the CD is stopped.
- Parts marked with "△" () () are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

REF. NO	DESCRIPTION	POSITION
SW763	CD	ON—OFF
SW764	MD	ON—OFF
SW767	TRACK EDIT	ON—OFF
SW772	EQUALIZER MODE	ON—OFF
SW773	X-BASS	ON—OFF
SW774	DISPLAY/CHARACTER	ON—OFF
SW775	MENU	ON—OFF
SW776	NAME TOC EDIT	ON—OFF
SW777	DELETE	ON—OFF
SW778	ENTER	ON—OFF
SW780	MD EJECT	ON—OFF
SW781	CD/MD	ON—OFF
SW782	MD RECORD	ON—OFF
SW783	PLAY MODE	ON—OFF
SW901	SPAN SELECTOR (CD-MD3000W Only)	9 kHz/50 kHz
SW1930	WRITE PRO	ON—OFF
SW1931	DISC MEDIA	ON—OFF
SW1932	LOADING	ON—OFF
SW1933	RECORD	ON—OFF
SW1934	PLAY	ON—OFF
SW1936	LEAD IN	ON—OFF
SWB101	DISC DETECT 1	ON—OFF
SWB102	DISC DETECT 2	ON—OFF
SWB103	DISC DETECT 3	ON—OFF
SWB104	MODE 1	ON—OFF
SWB105	MODE 2	ON—OFF
SWB106	MODE 3	ON—OFF
SWB107	MODE 4	ON—OFF
SWB108	MODE 5	ON—OFF
SWB109	TRAY 1	ON—OFF
SWB110	TRAY 2	ON—OFF

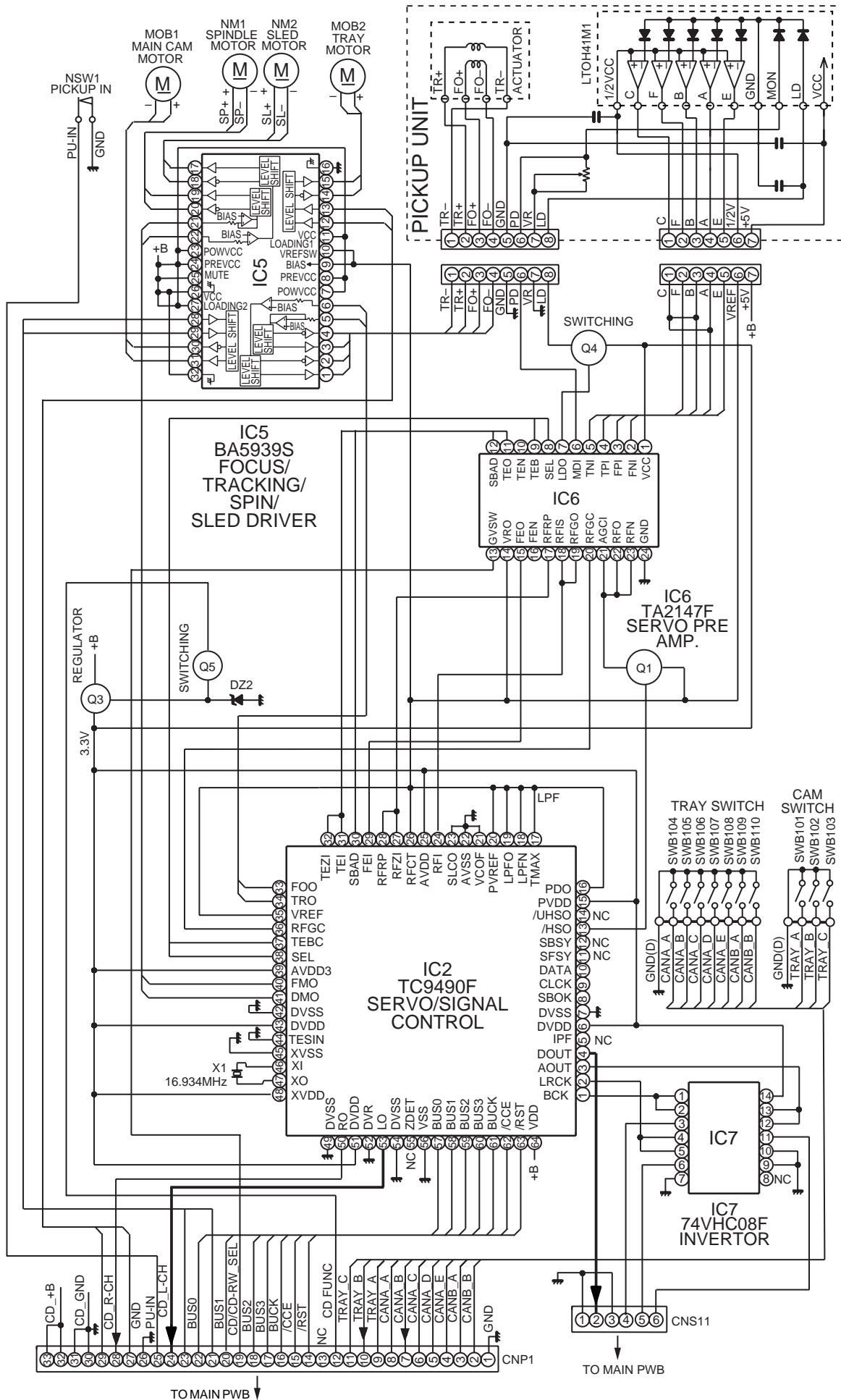


Figure 47 BLOCK DIAGRAM (1/7)

CD-MD3000H/CD-MD3000W

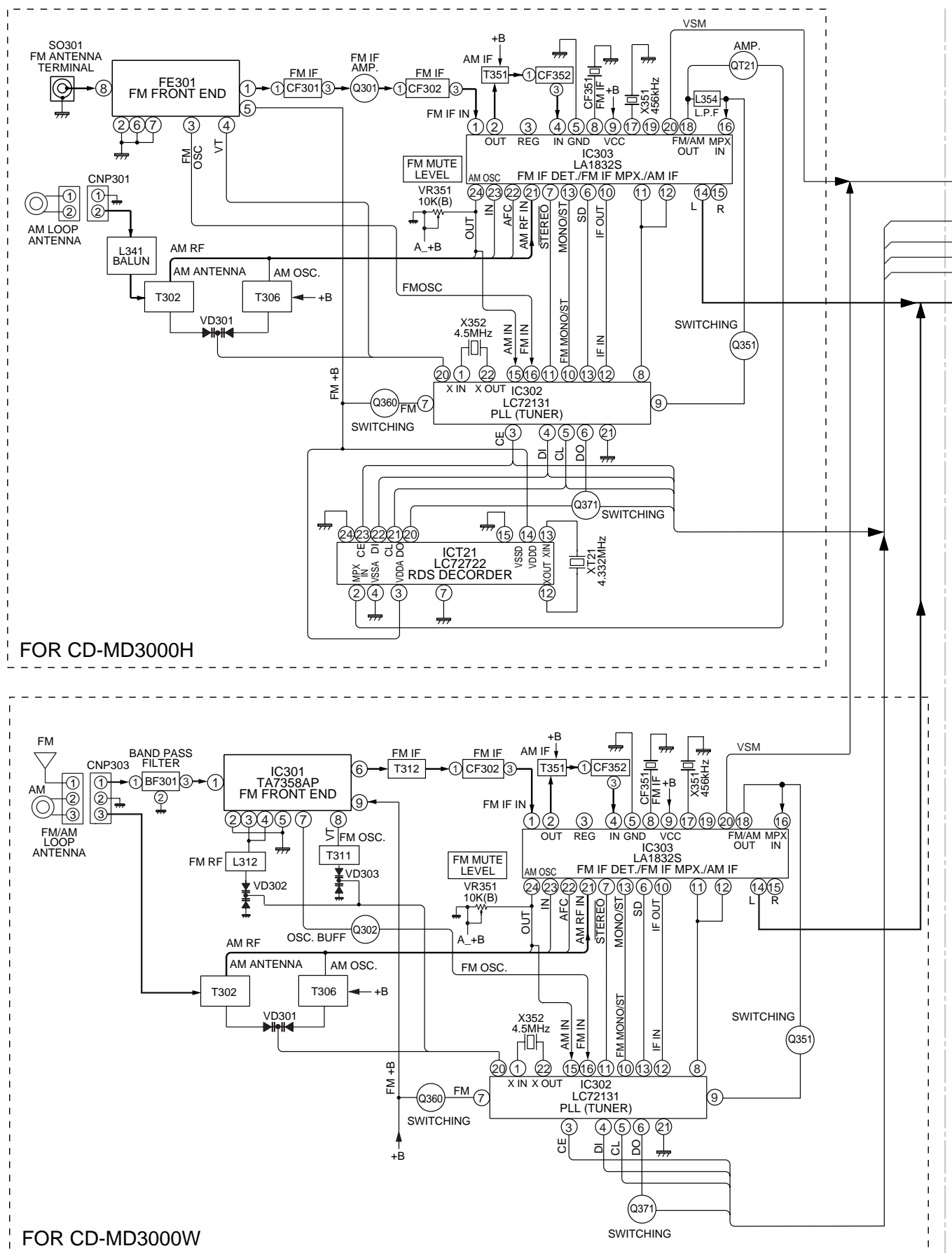


Figure 48 BLOCK DIAGRAM (2/7)

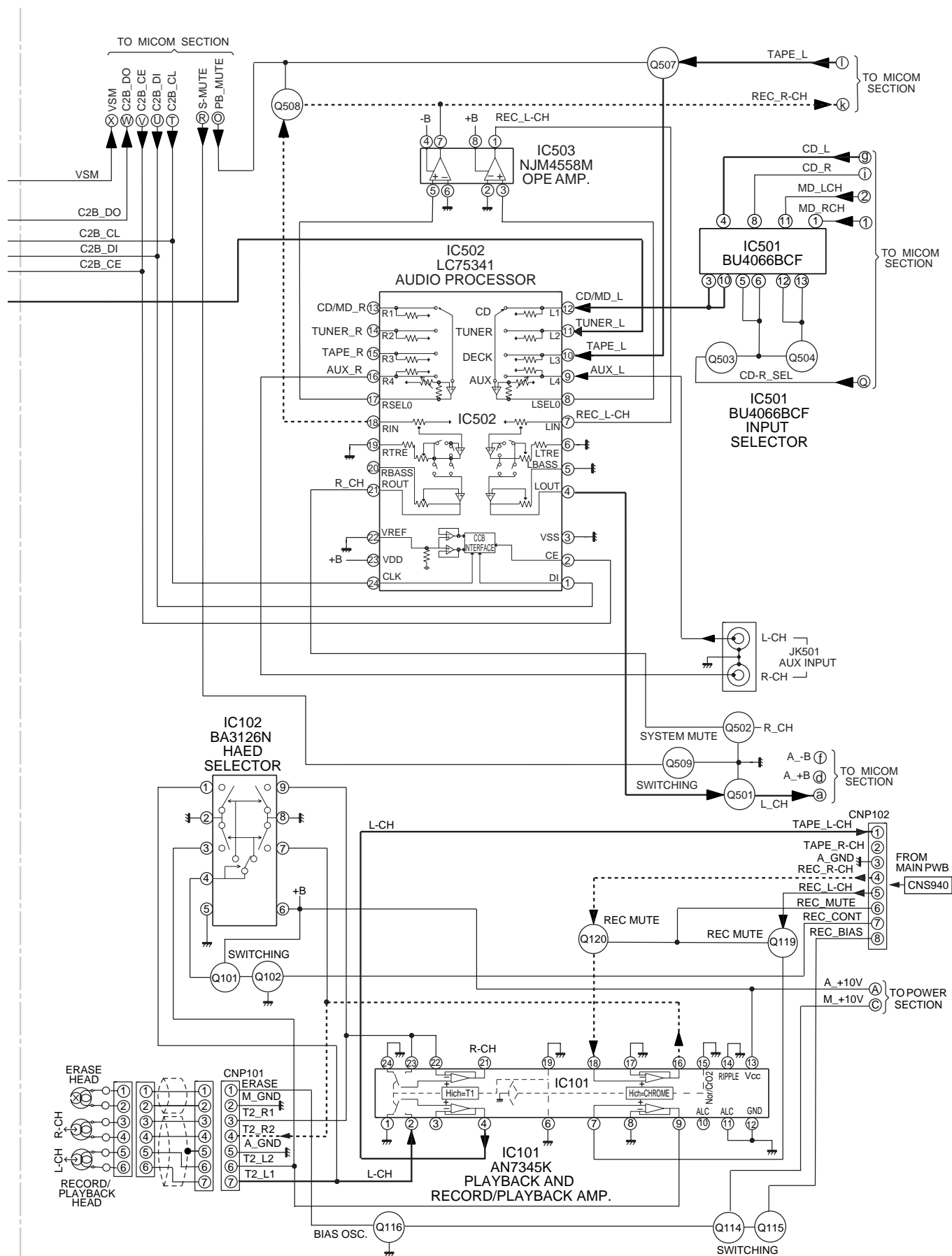


Figure 49 BLOCK DIAGRAM (3/7)

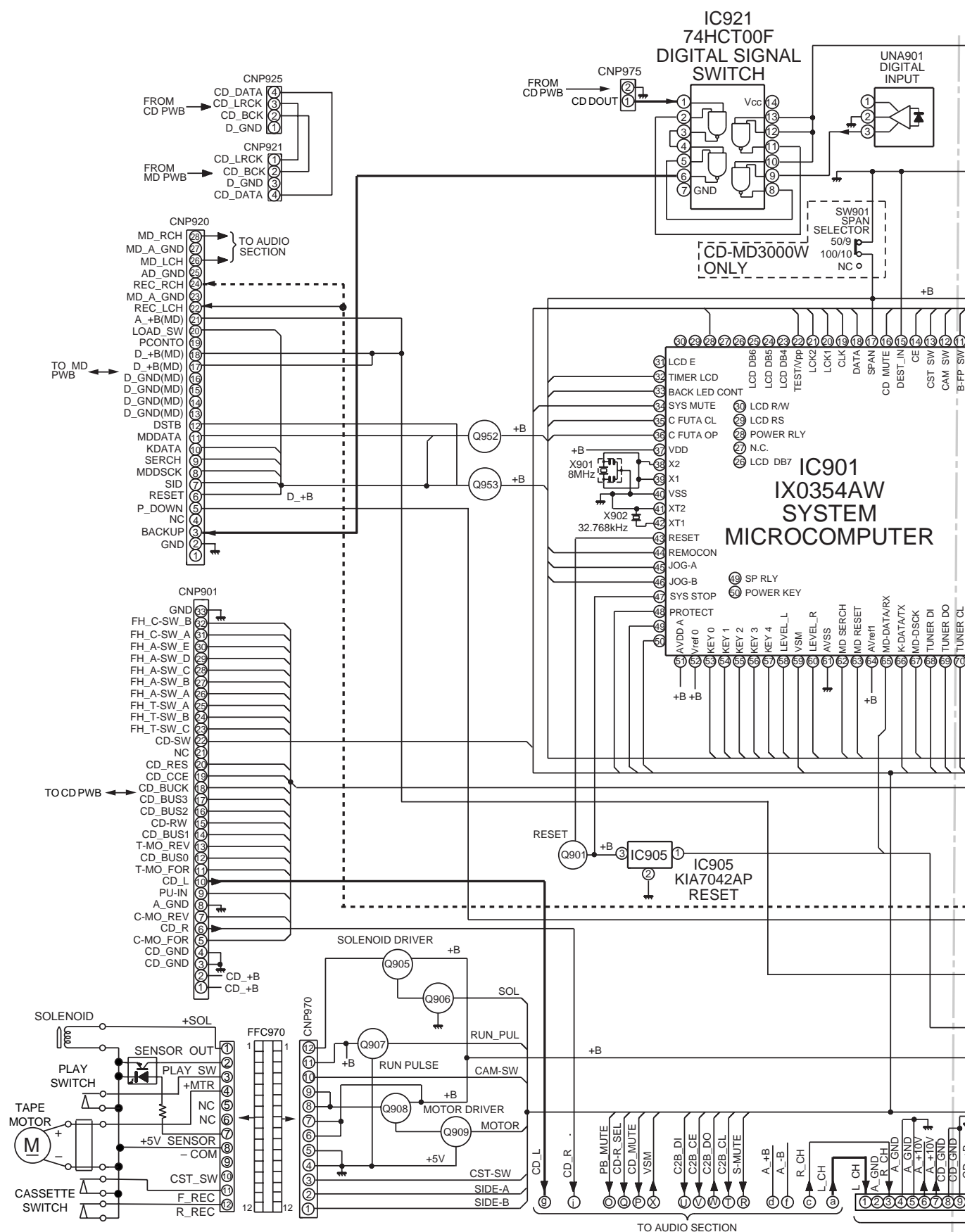


Figure 50 BLOCK DIAGRAM (4/7)

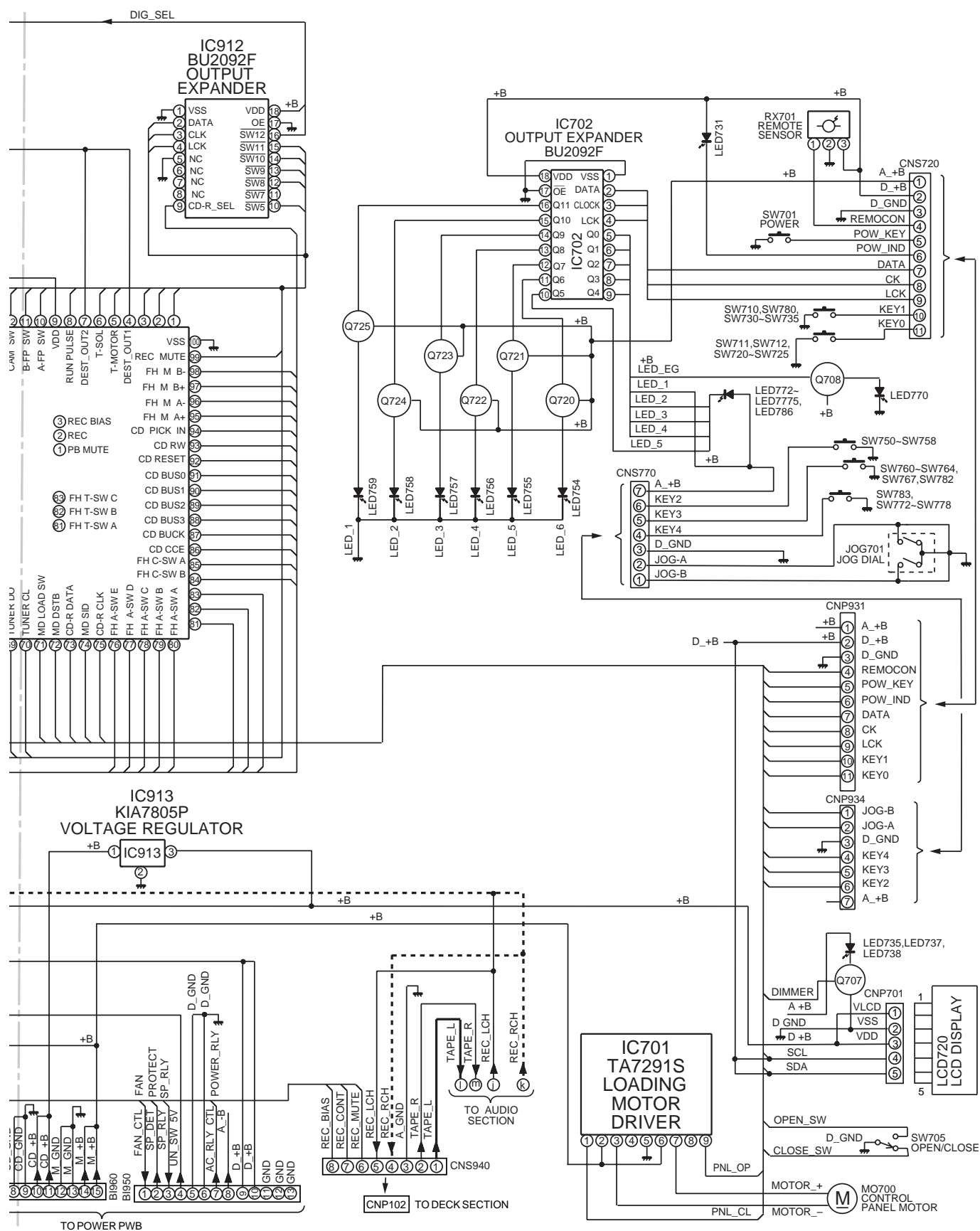


Figure 51 BLOCK DIAGRAM (5/7)

CD-MD3000H/CD-MD3000W

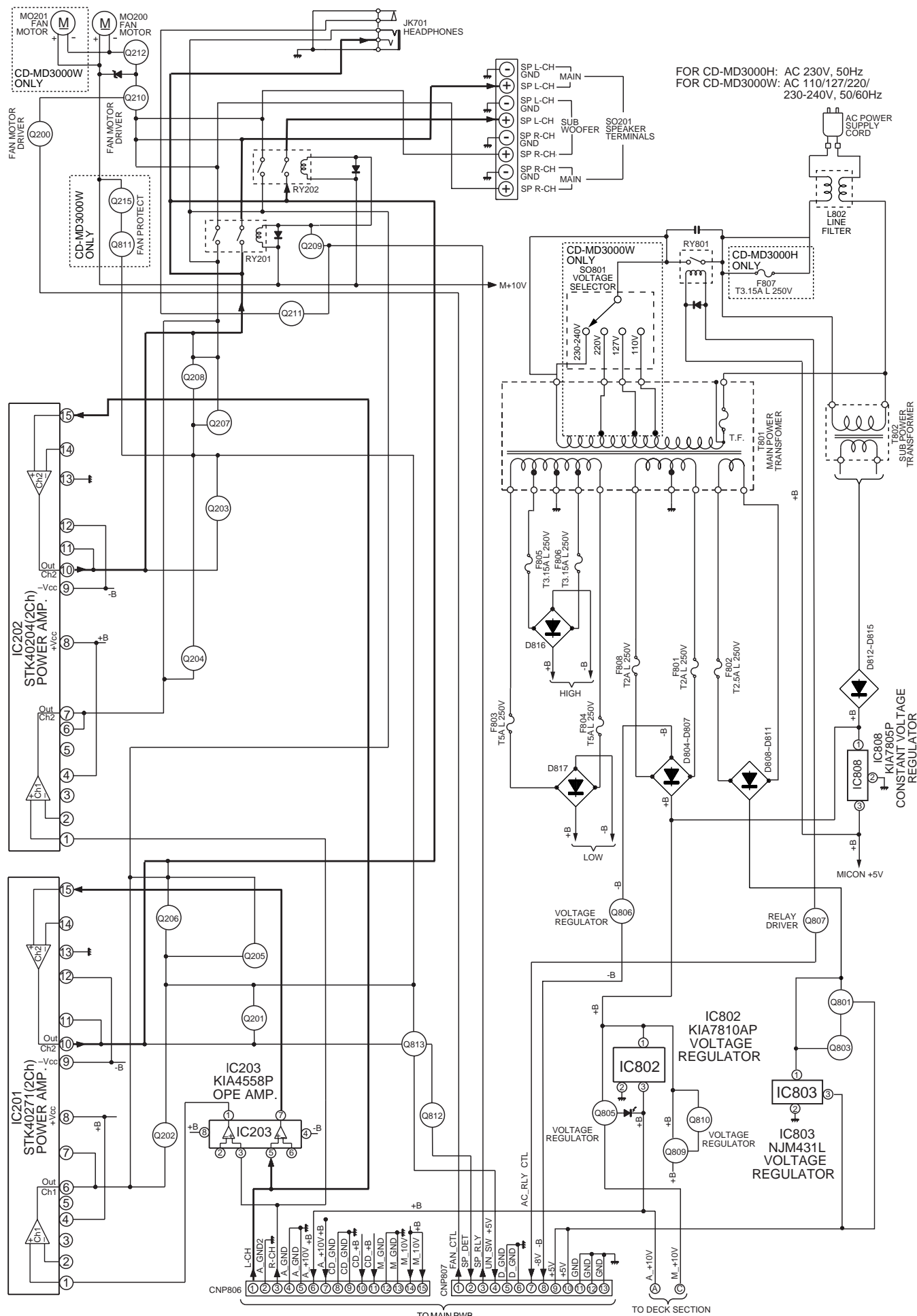


Figure 52 BLOCK DIAGRAM (6/7)

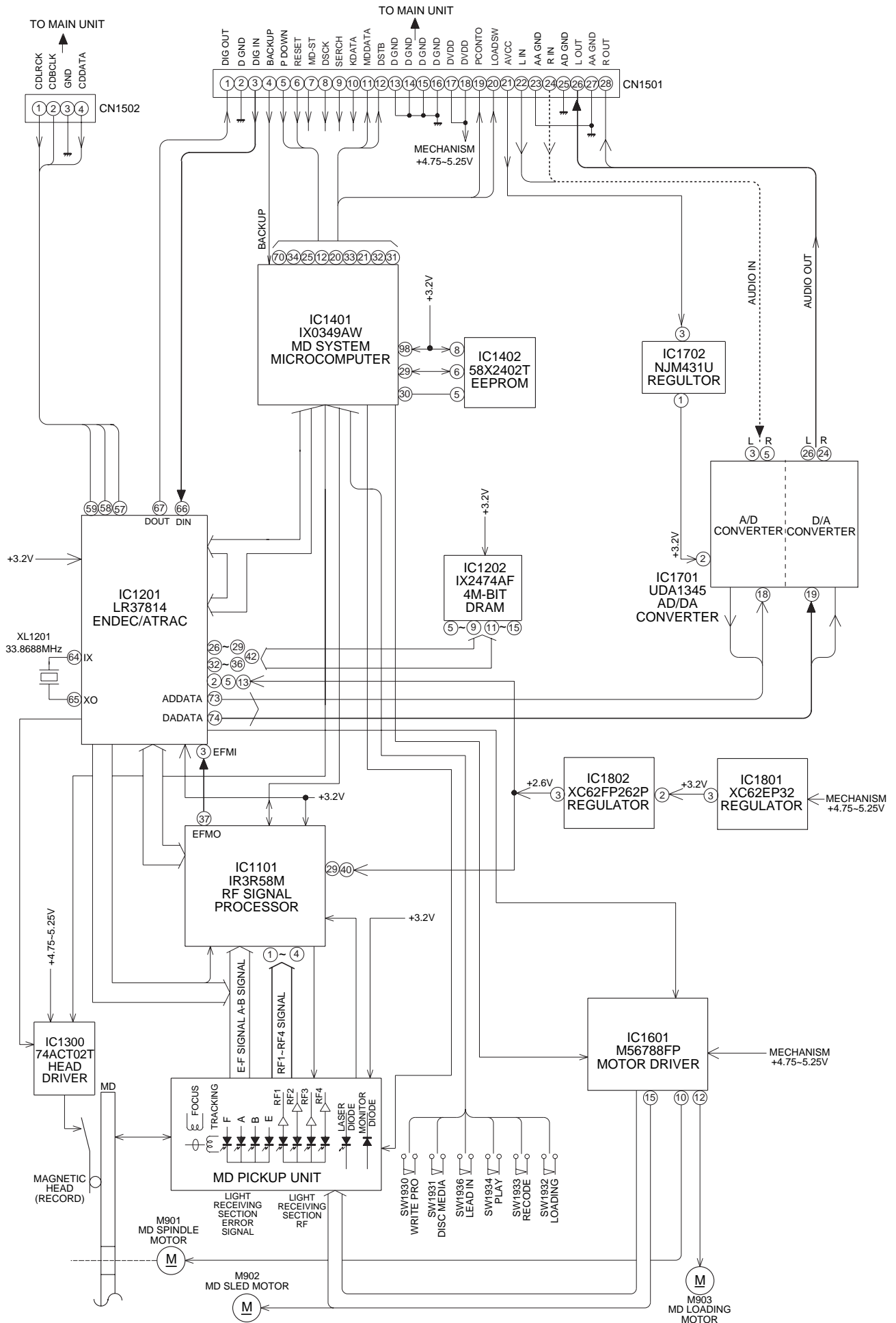
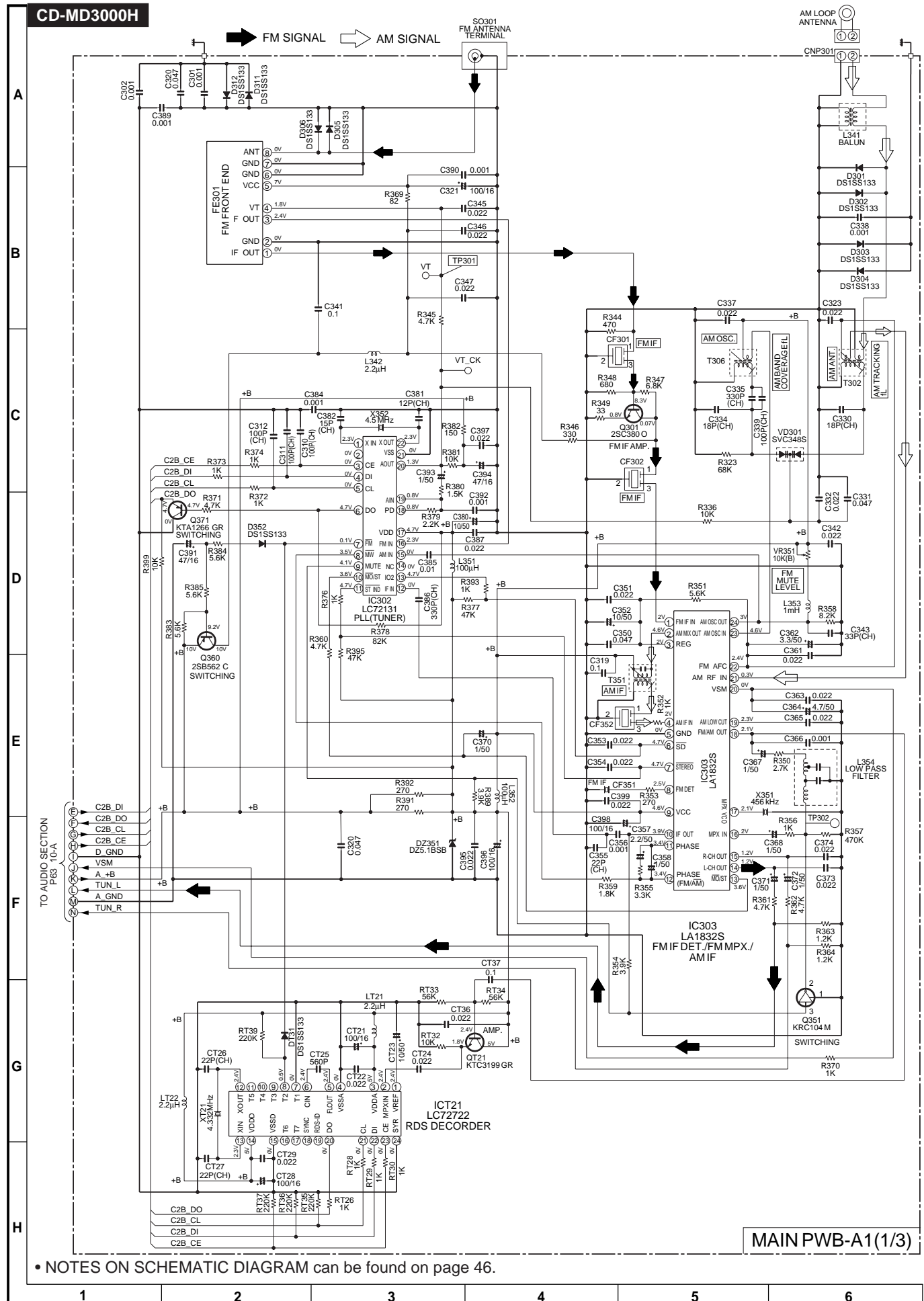


Figure 53 BLOCK DIAGRAM (7/7)



CD-MD3000W

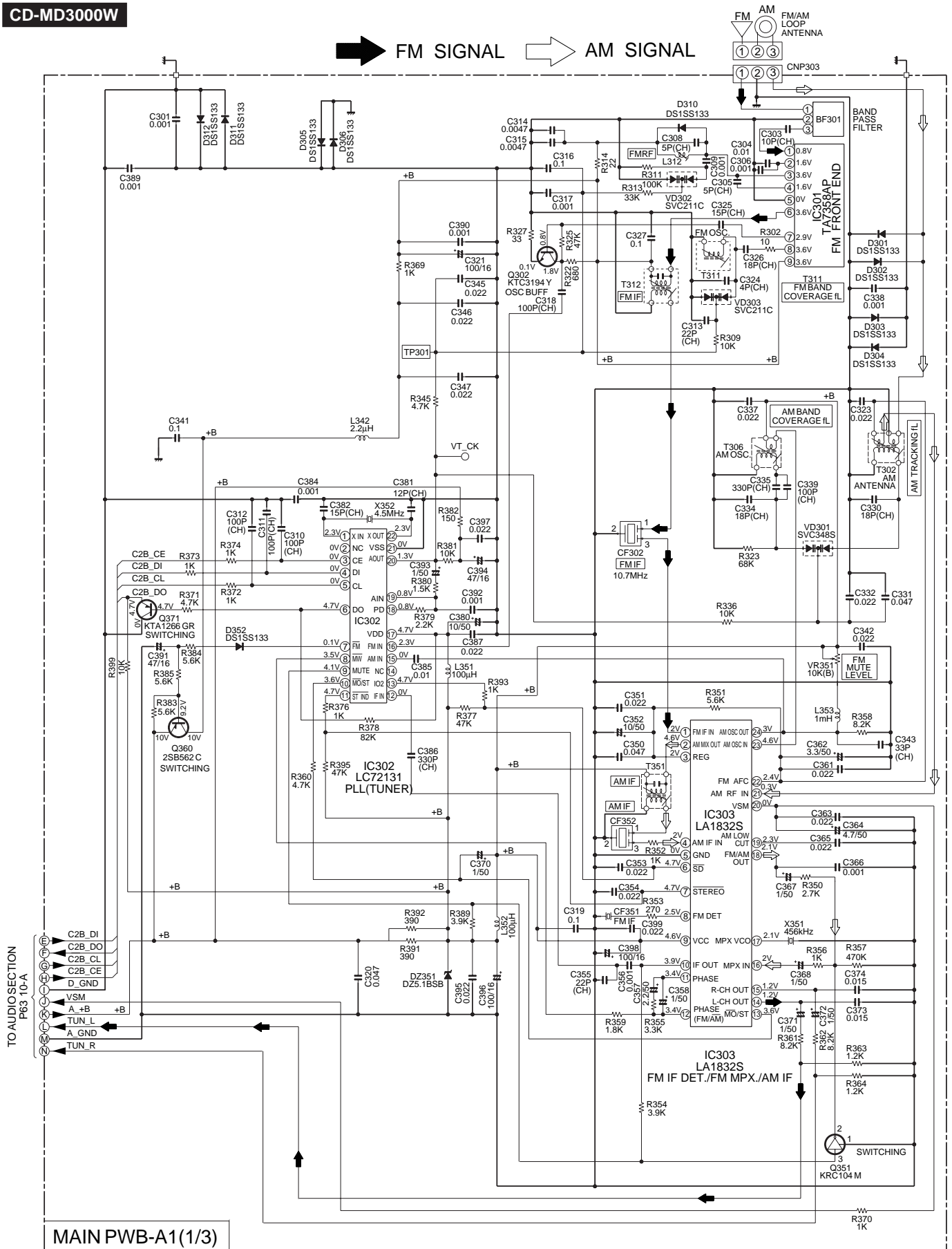


Figure 55 SCHEMATIC DIAGRAM (2/16)

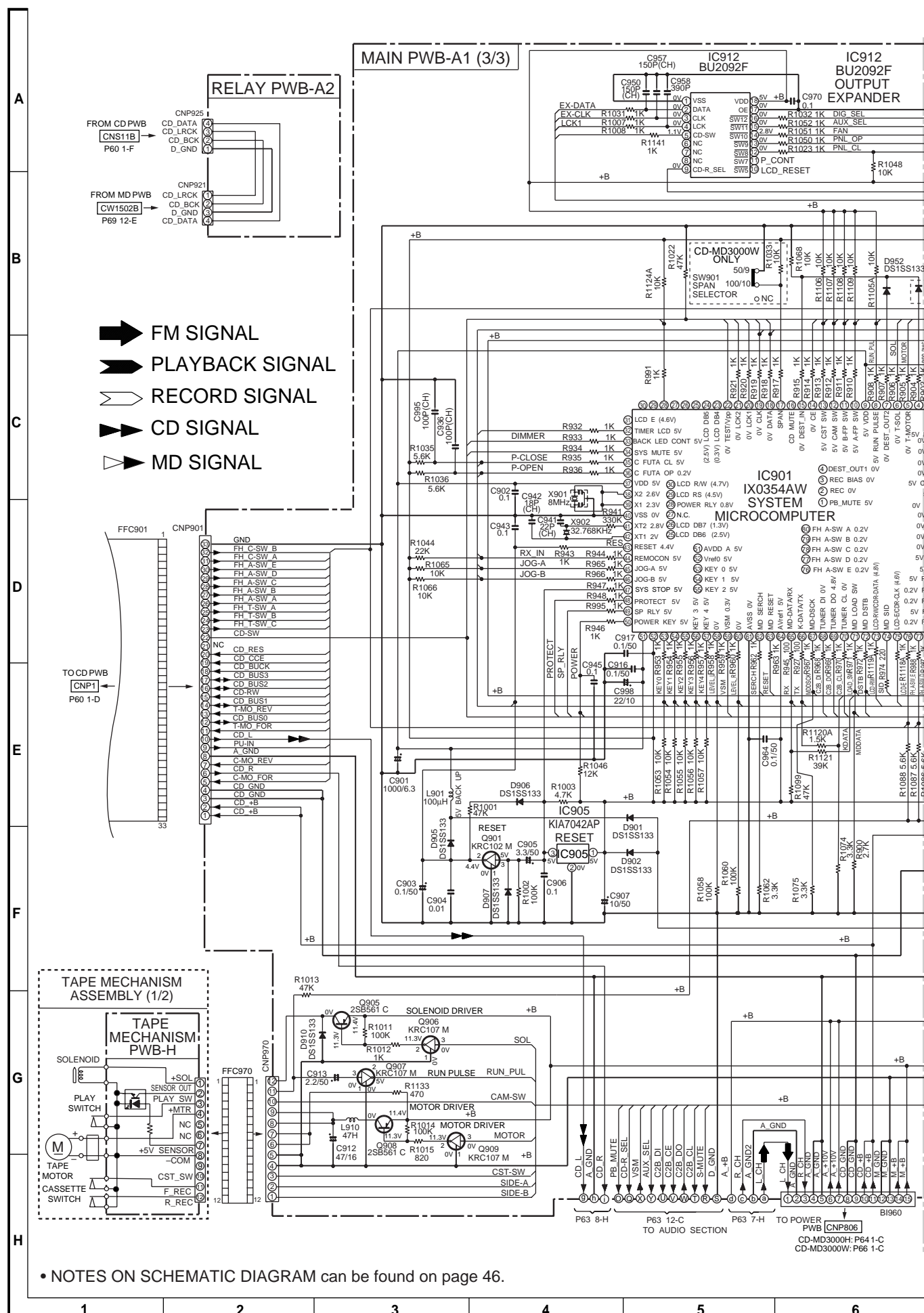
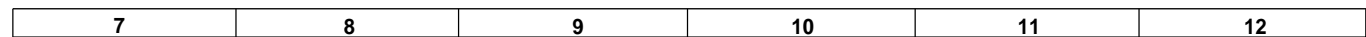


Figure 56 SCHEMATIC DIAGRAM (3/16)



- 57 -

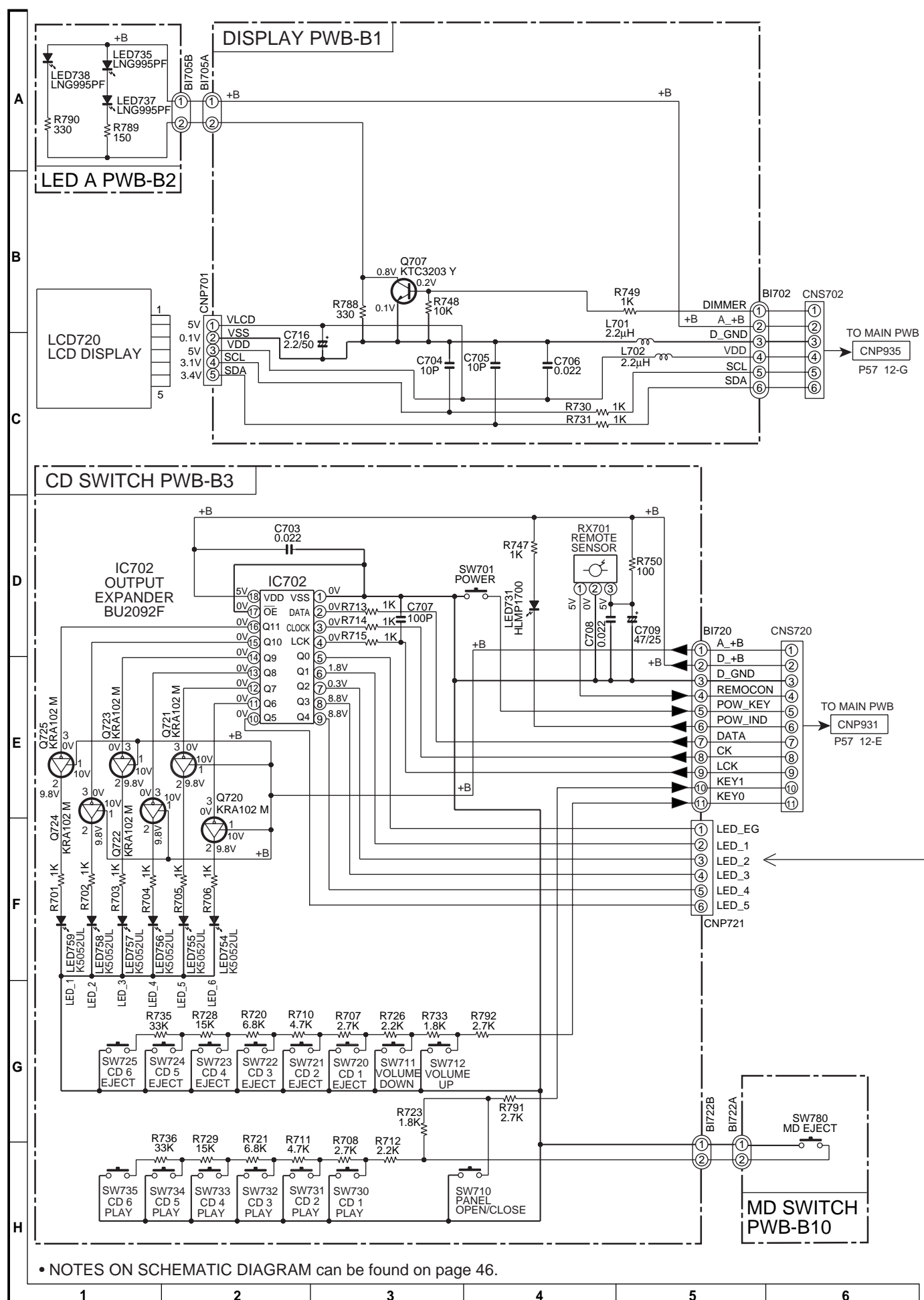


Figure 58 SCHEMATIC DIAGRAM (5/16)

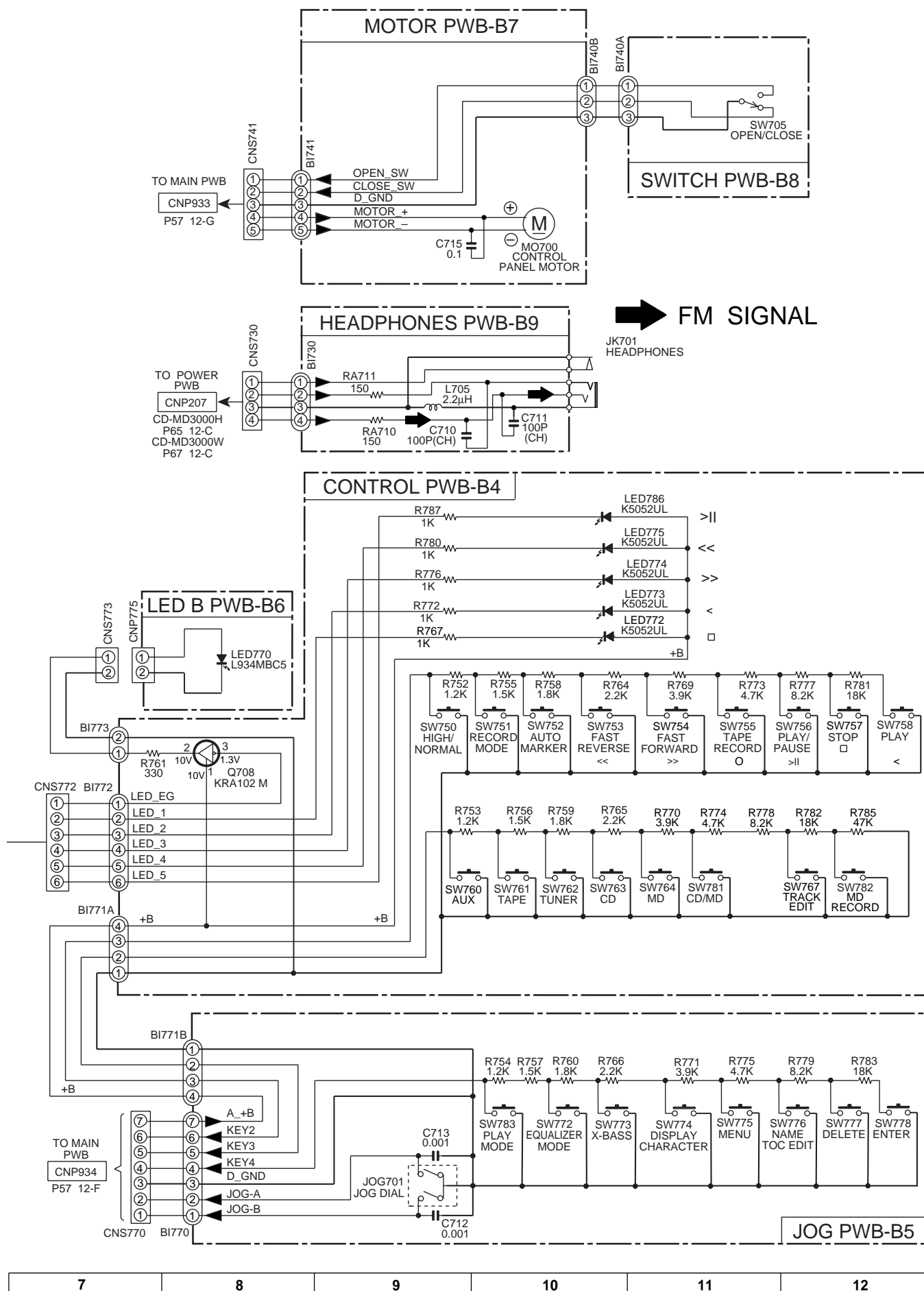
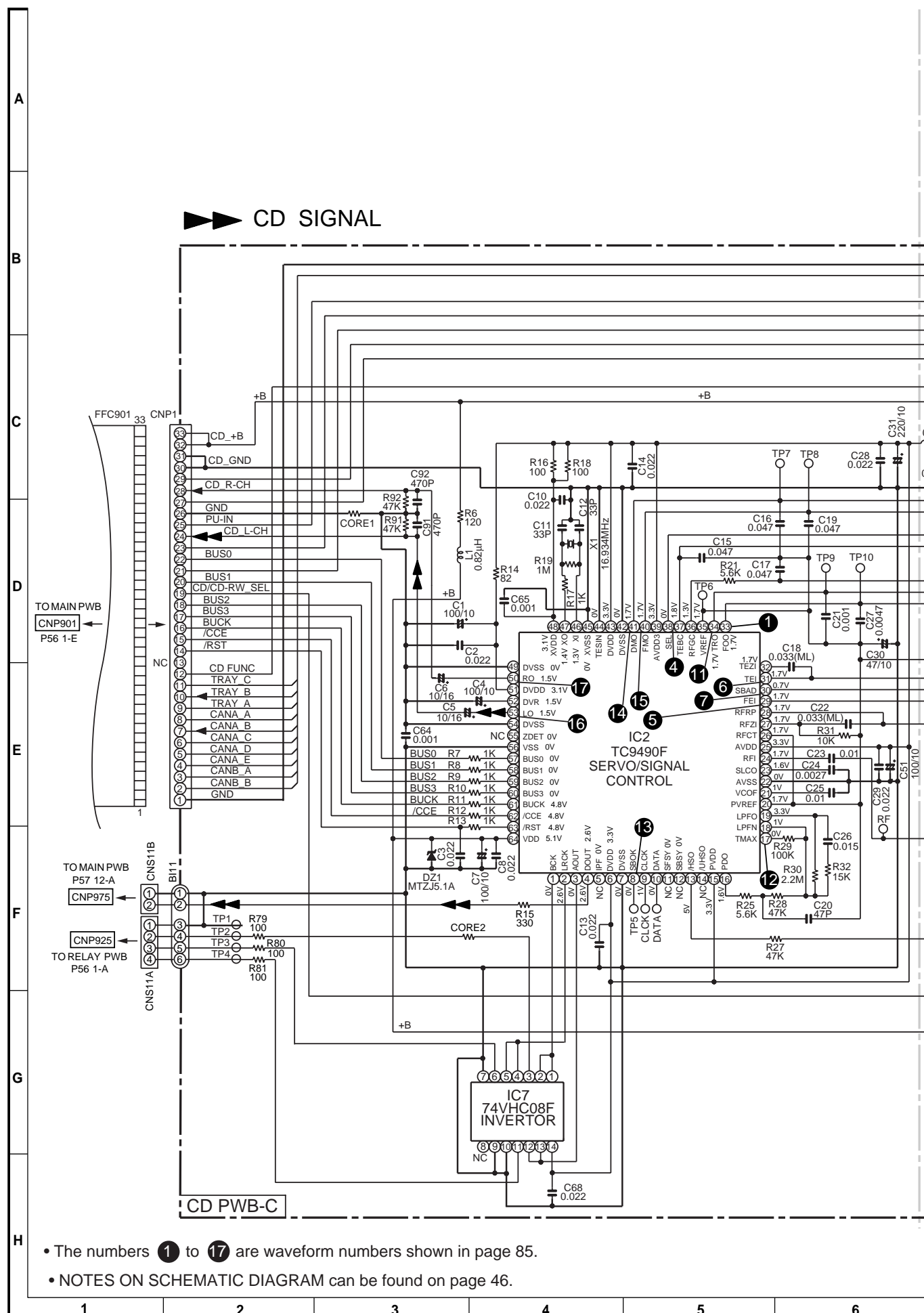


Figure 59 SCHEMATIC DIAGRAM (6/16)



- The numbers ① to ⑰ are waveform numbers shown in page 85.
- NOTES ON SCHEMATIC DIAGRAM can be found on page 46.

Figure 60 SCHEMATIC DIAGRAM (7/16)

CD-MD3000H/CD-MD3000W

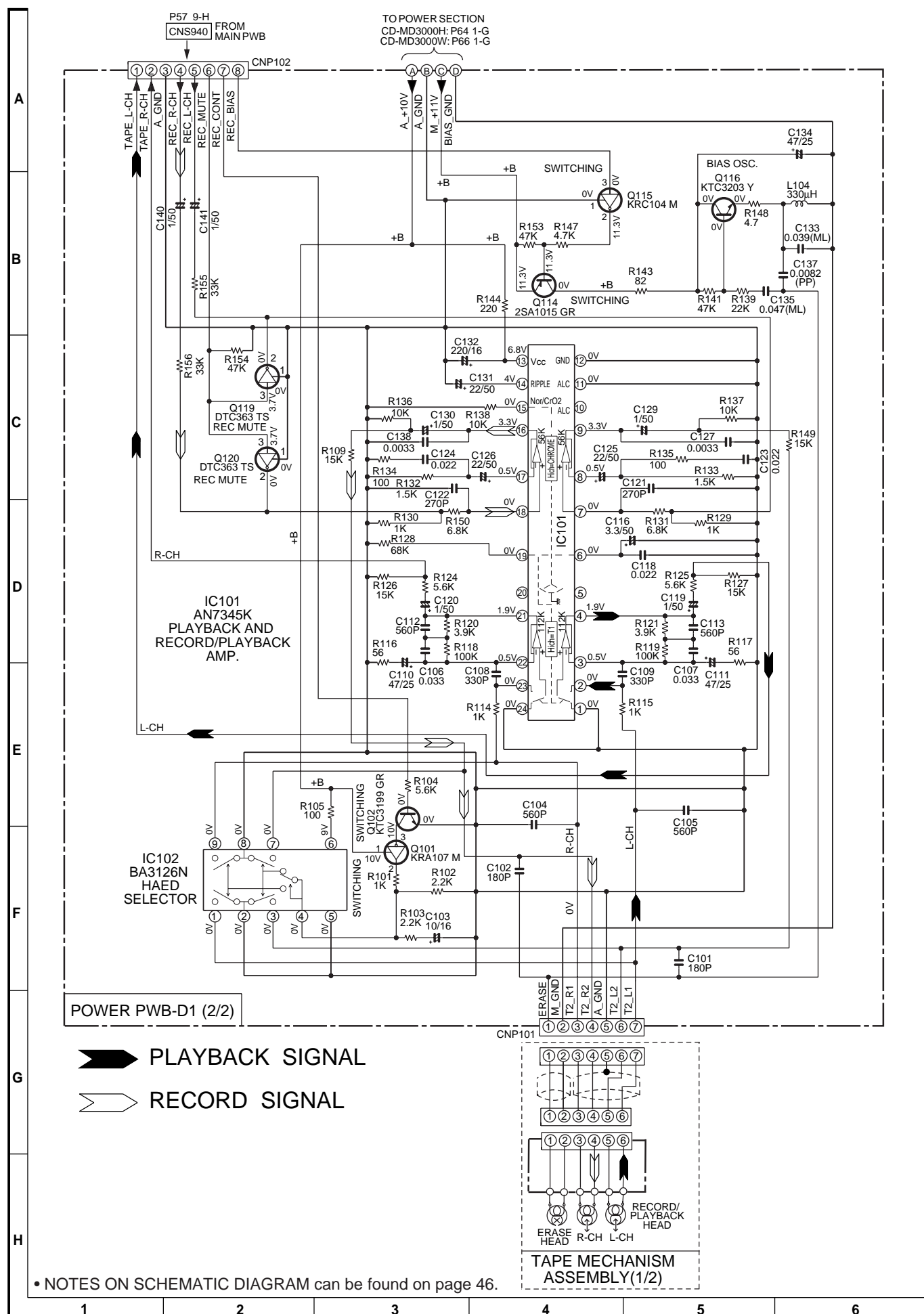


Figure 62 SCHEMATIC DIAGRAM (9/16)

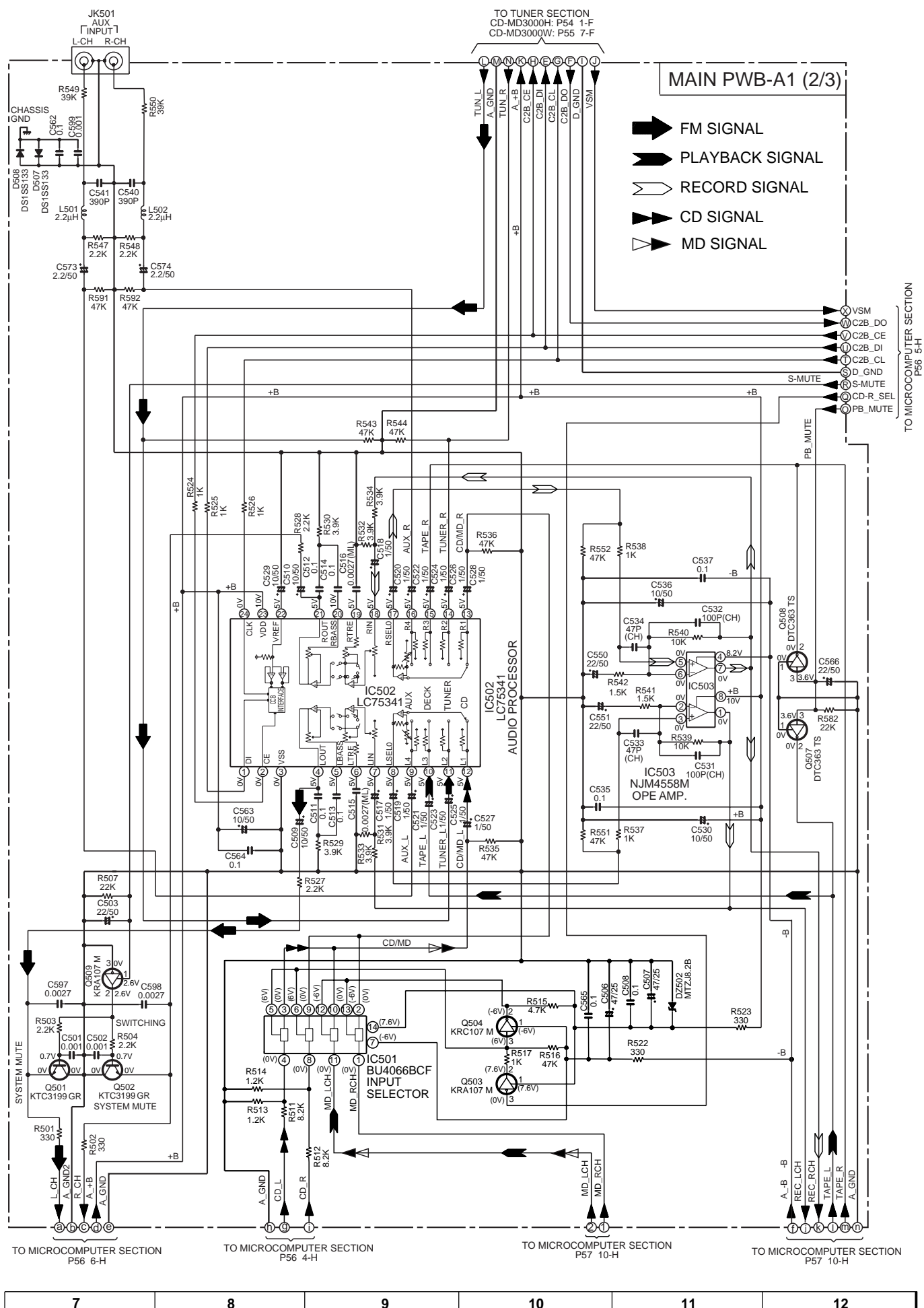


Figure 63 SCHEMATIC DIAGRAM (10/16)

CD-MD3000H

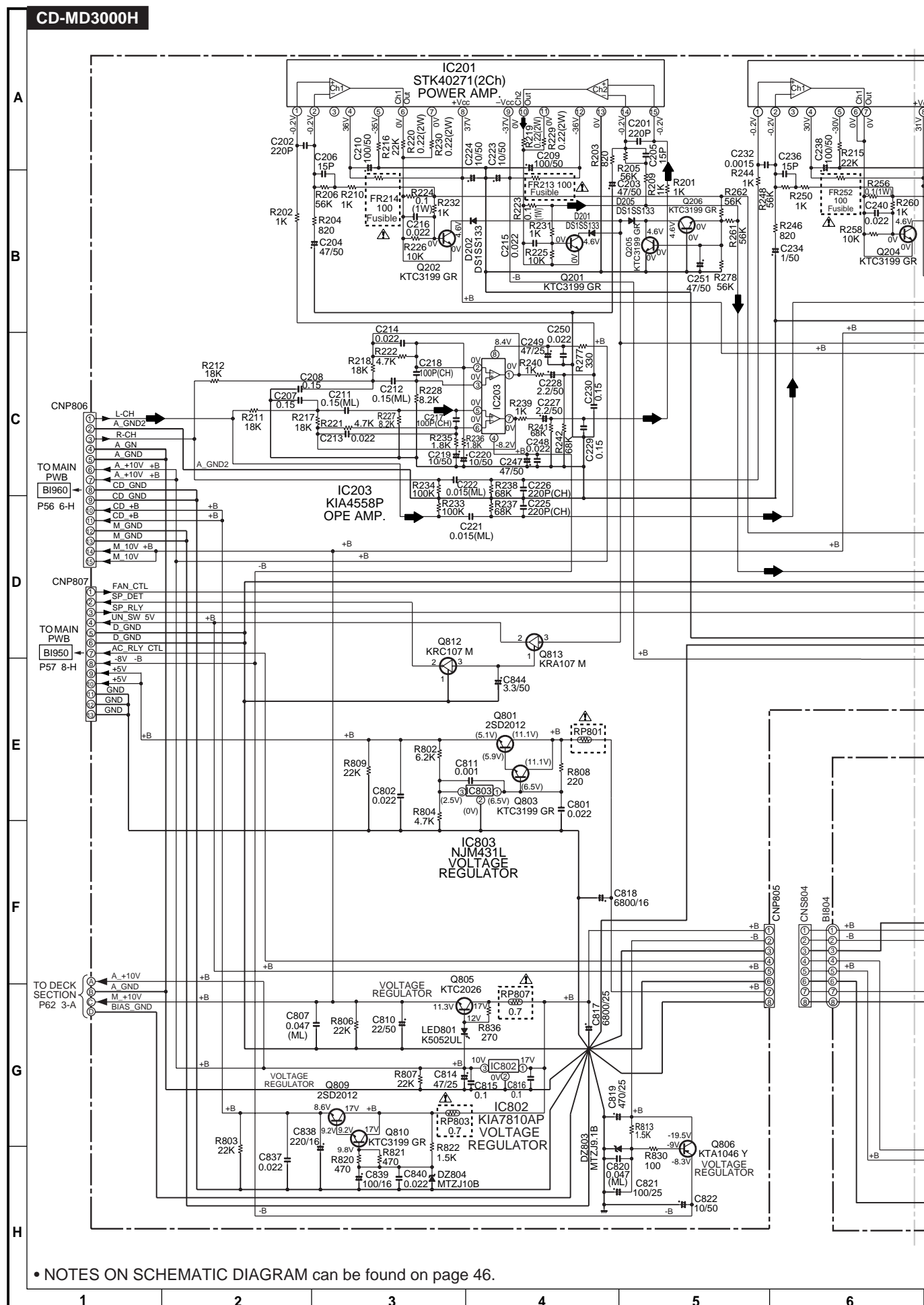


Figure 64 SCHEMATIC DIAGRAM (11/16)

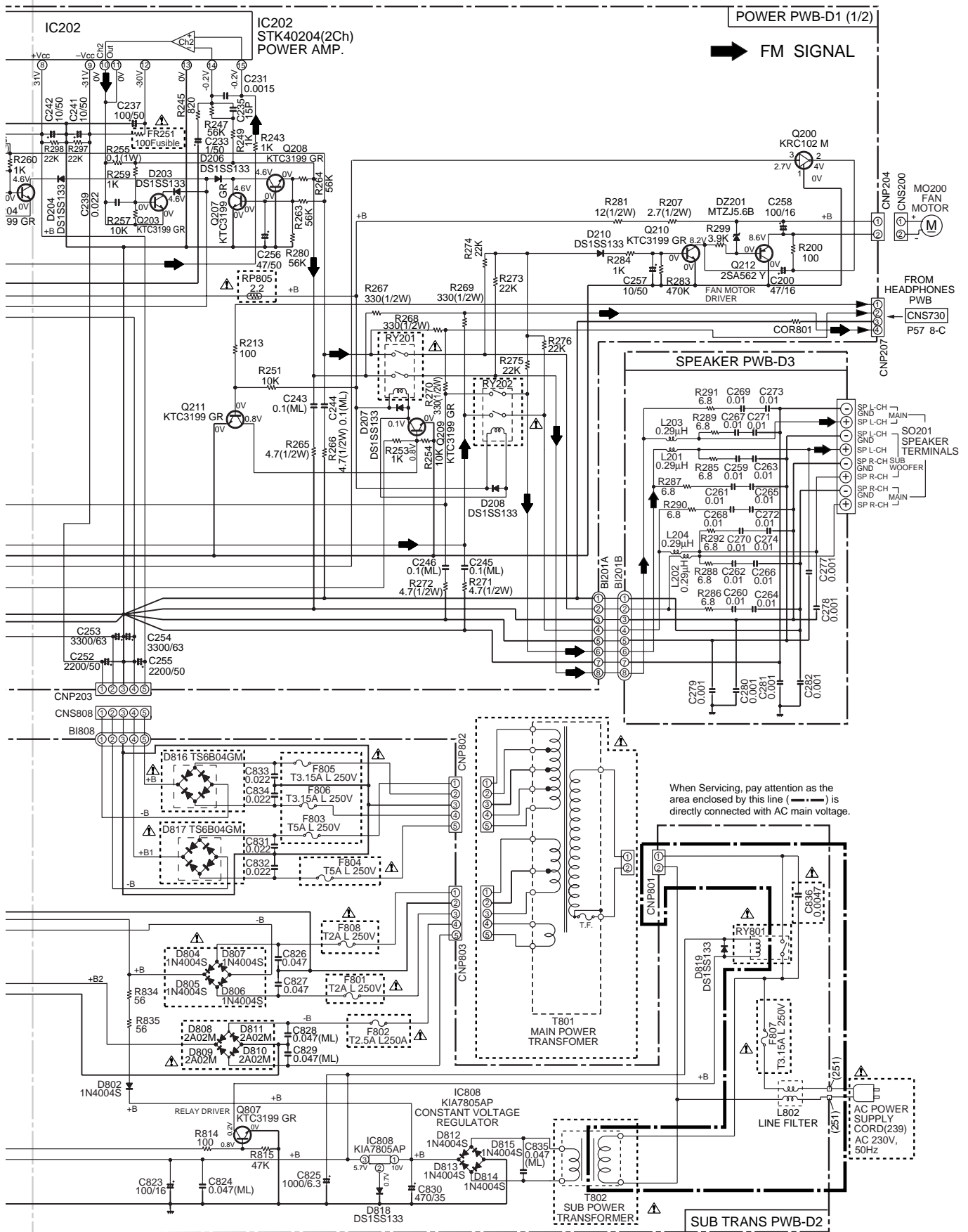
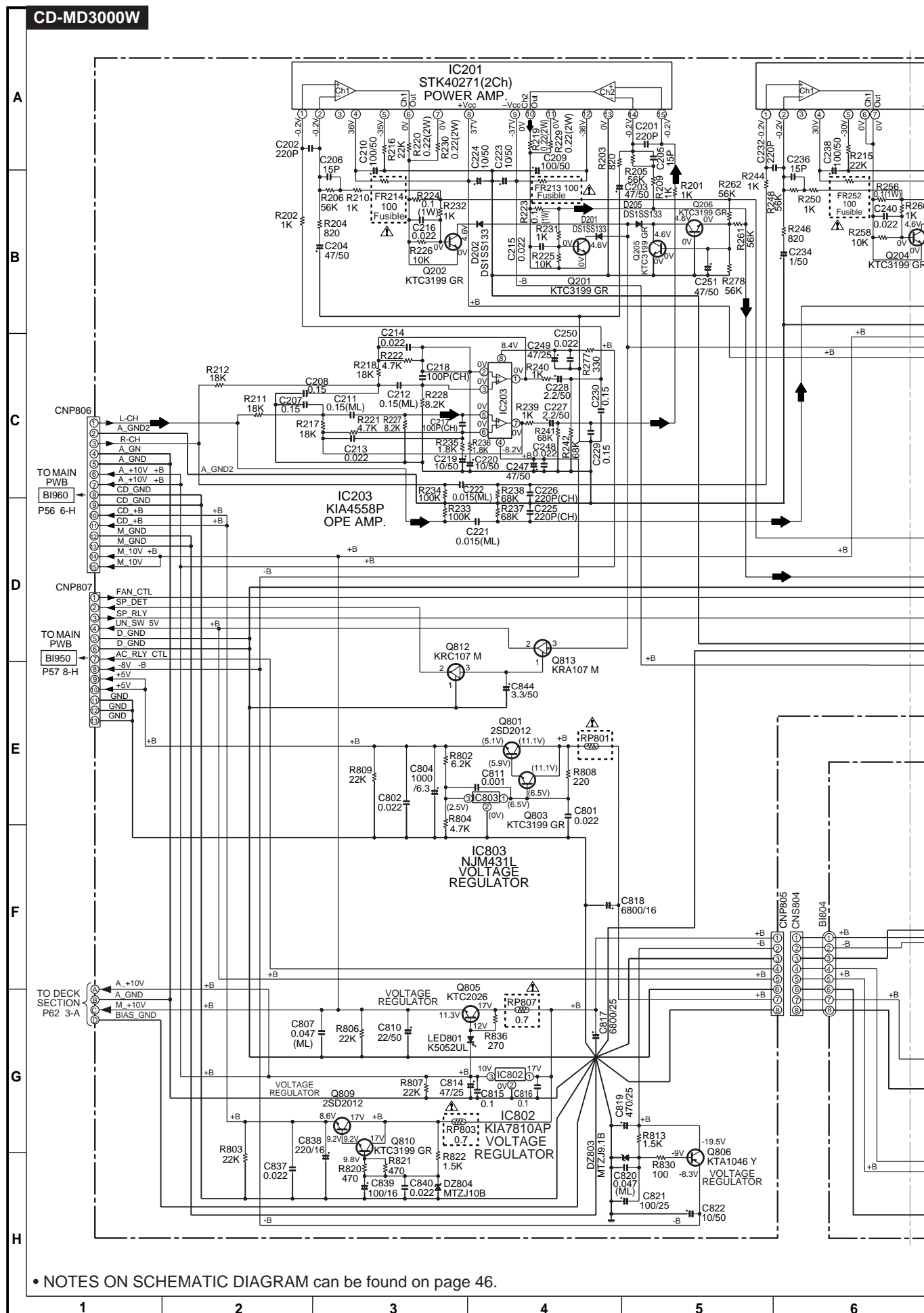


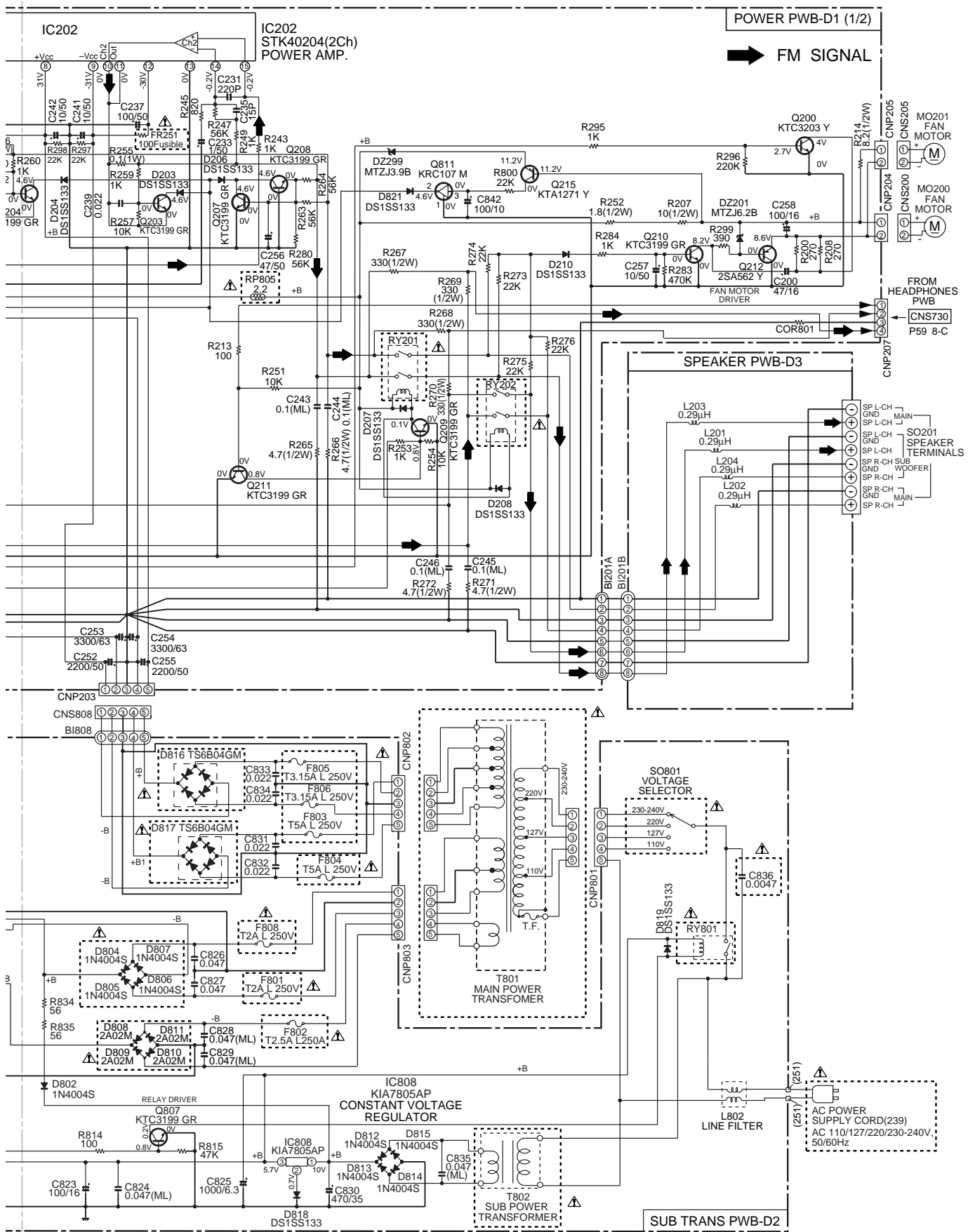
Figure 65 SCHEMATIC DIAGRAM (12/16)

CD-MD3000W



• NOTES ON SCHEMATIC DIAGRAM can be found on page 46.

Figure 66 SCHEMATIC DIAGRAM (13/16)



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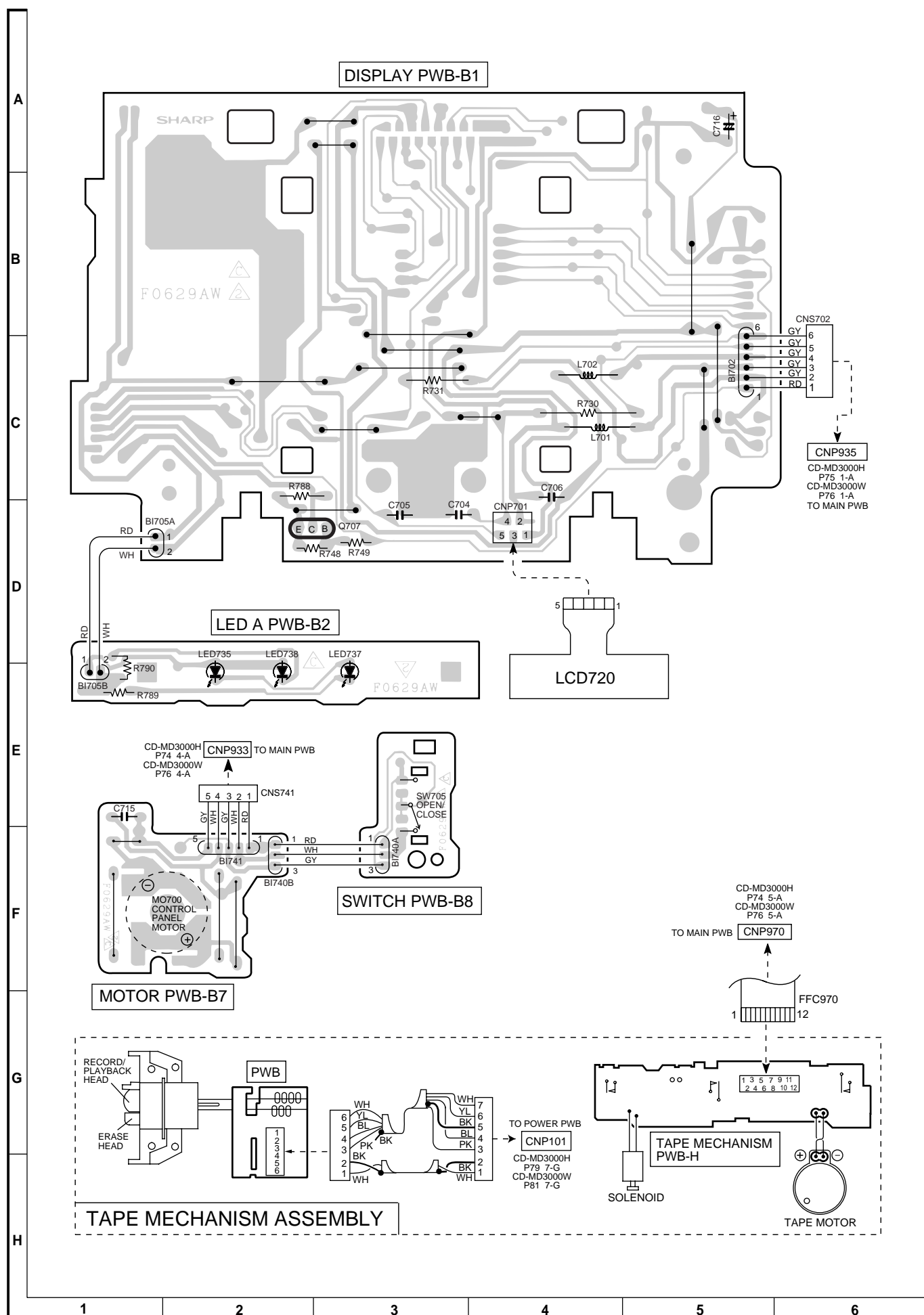


Figure 70 WIRING SIDE OF P.W.BOARD (1/14)

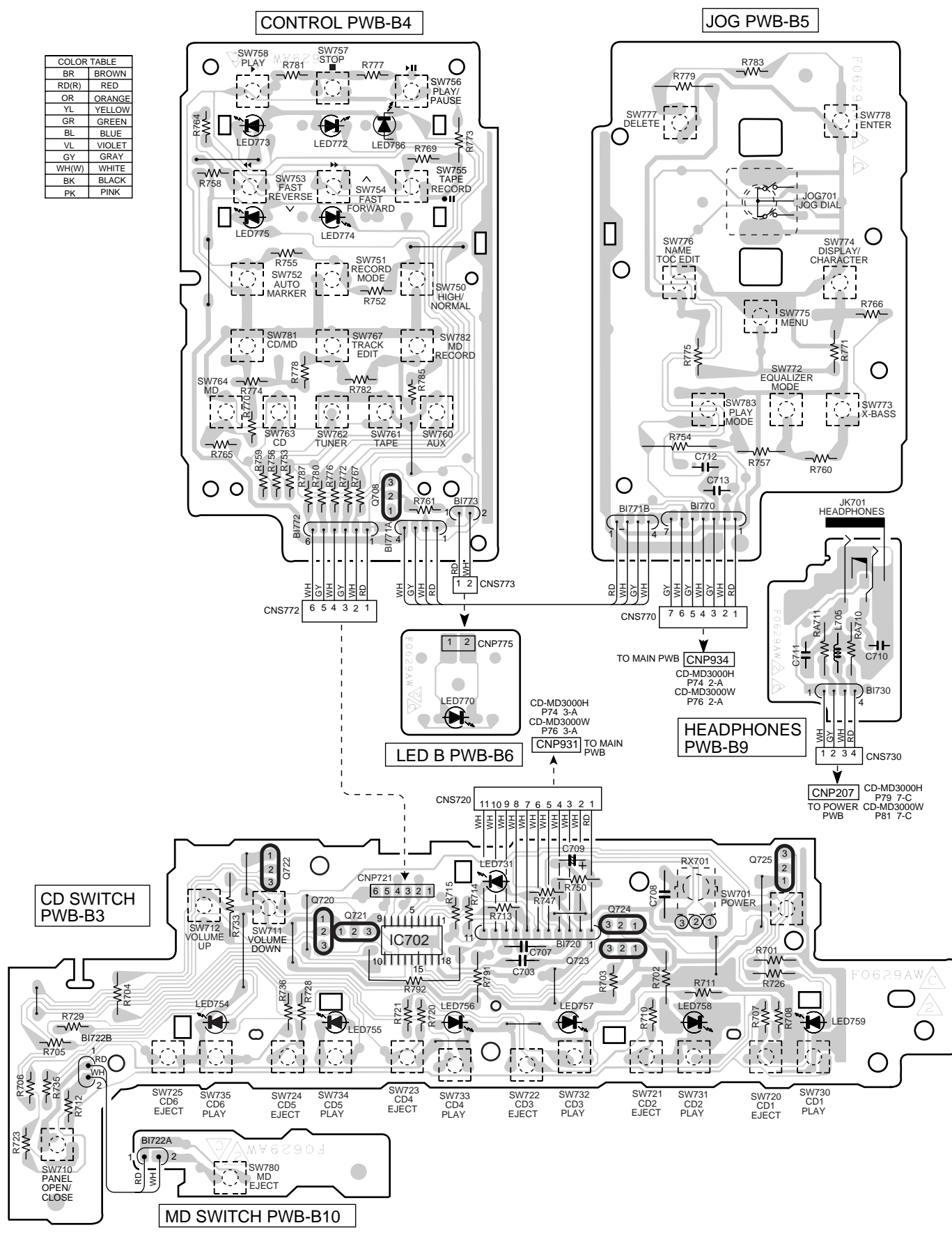
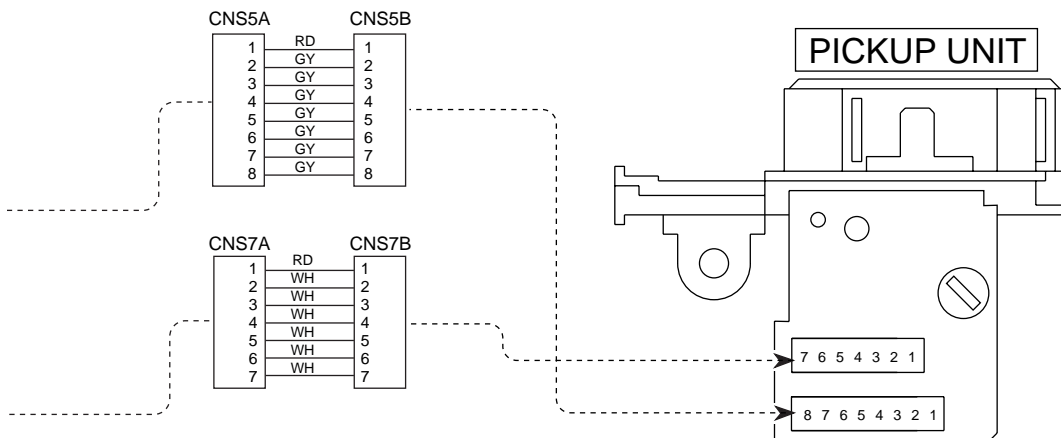
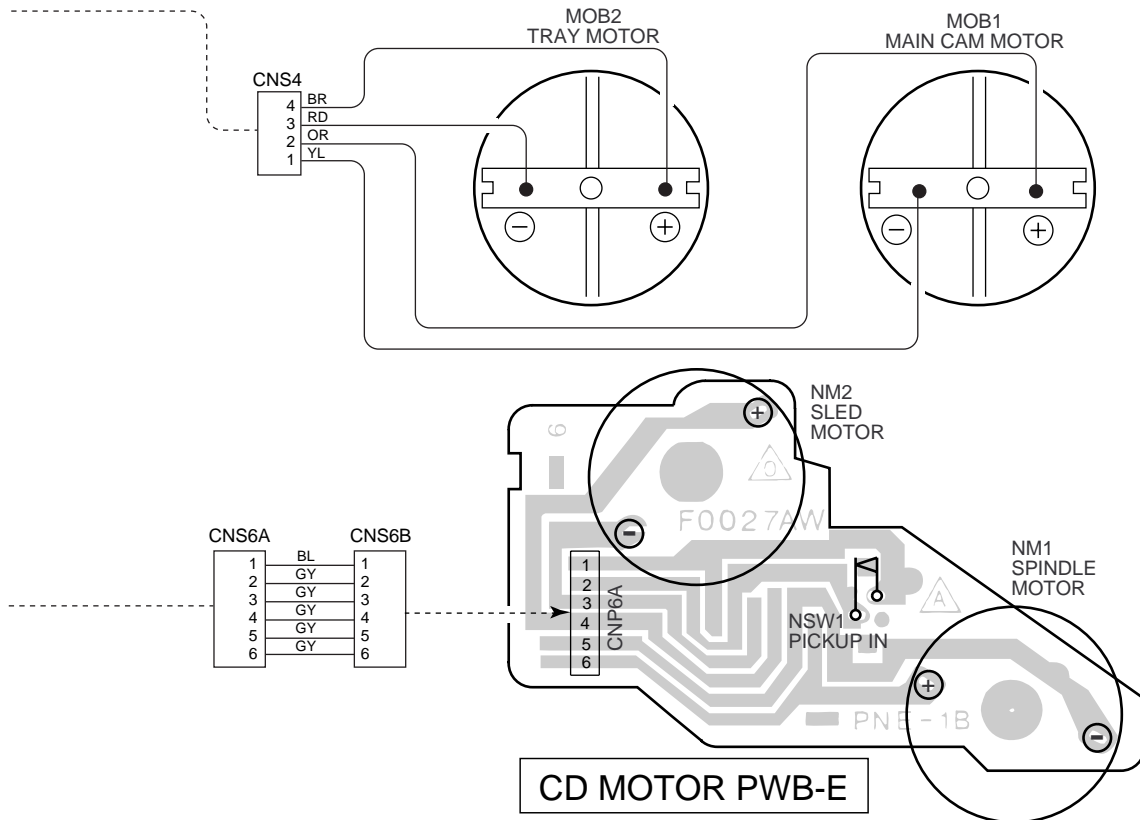
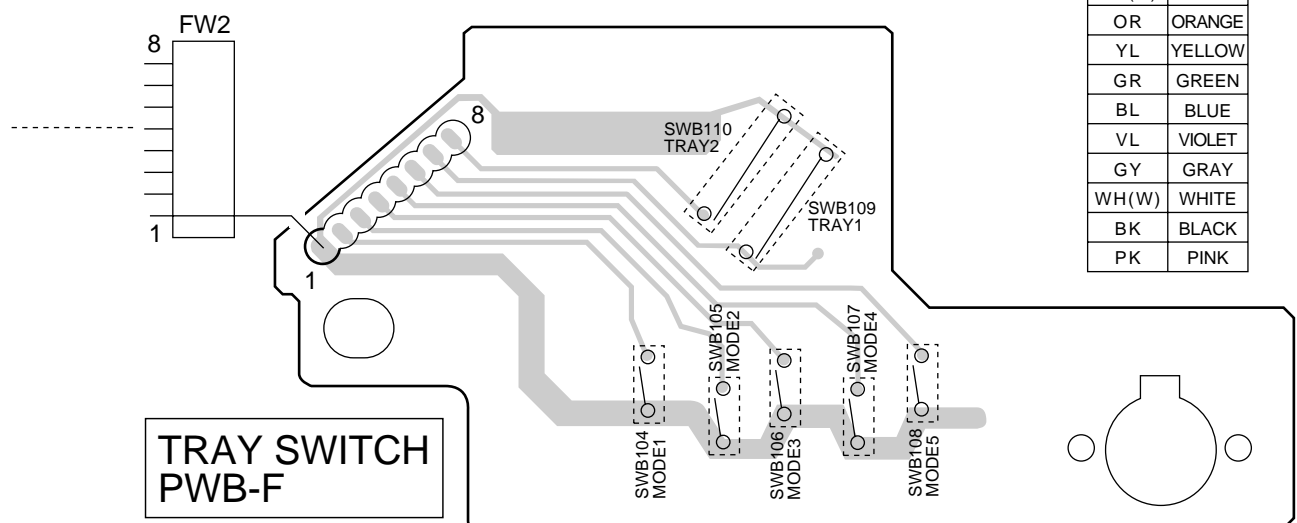


Figure 71 WIRING SIDE OF P.W.BOARD (2/14)

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COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK



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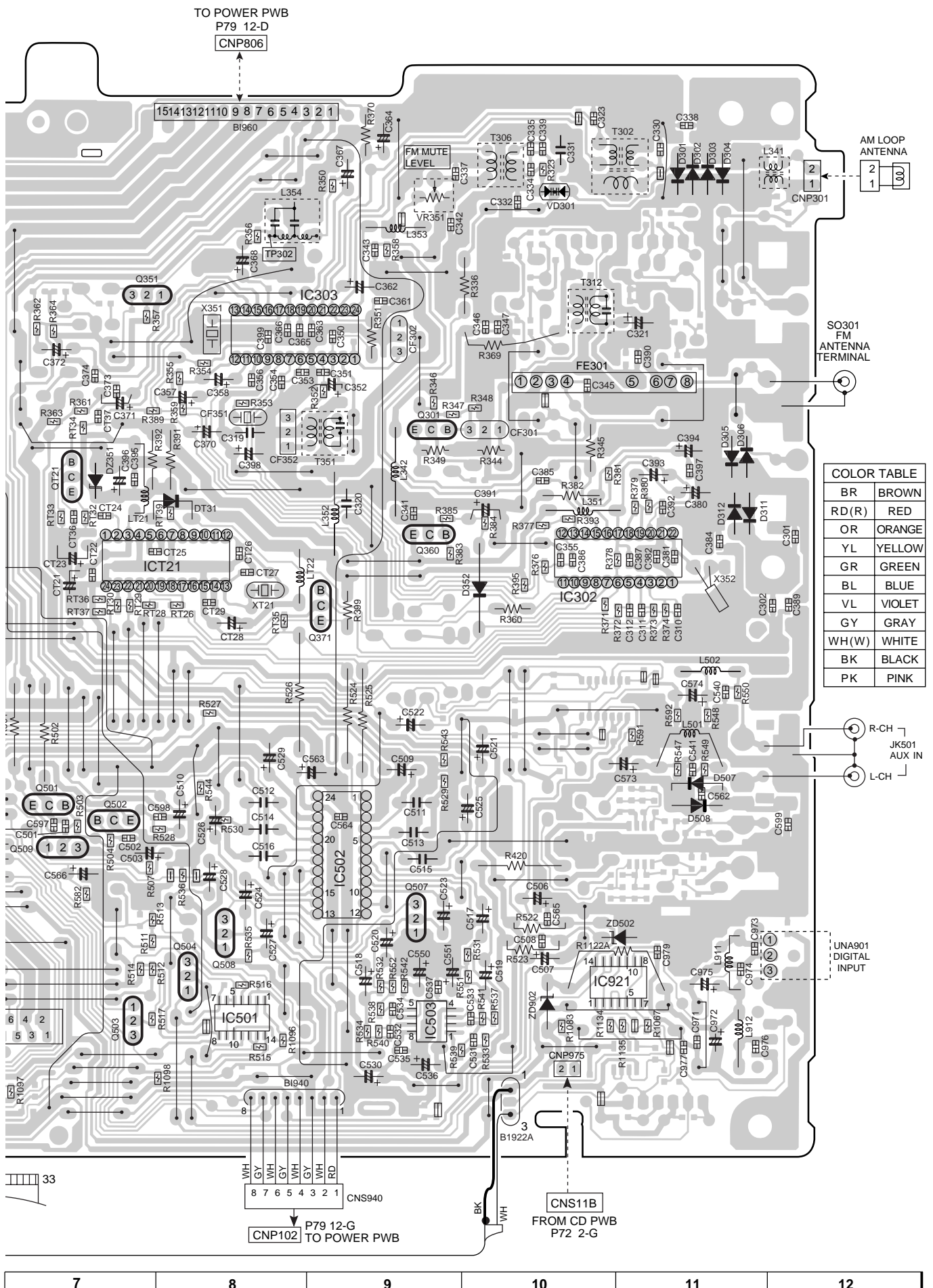


Figure 75 WIRING SIDE OF P.W.BOARD (6/14)

- 76 -



Figure 77 WIRING SIDE OF P.W.BOARD (8/14)

- 78 -

POWER PWB-D1

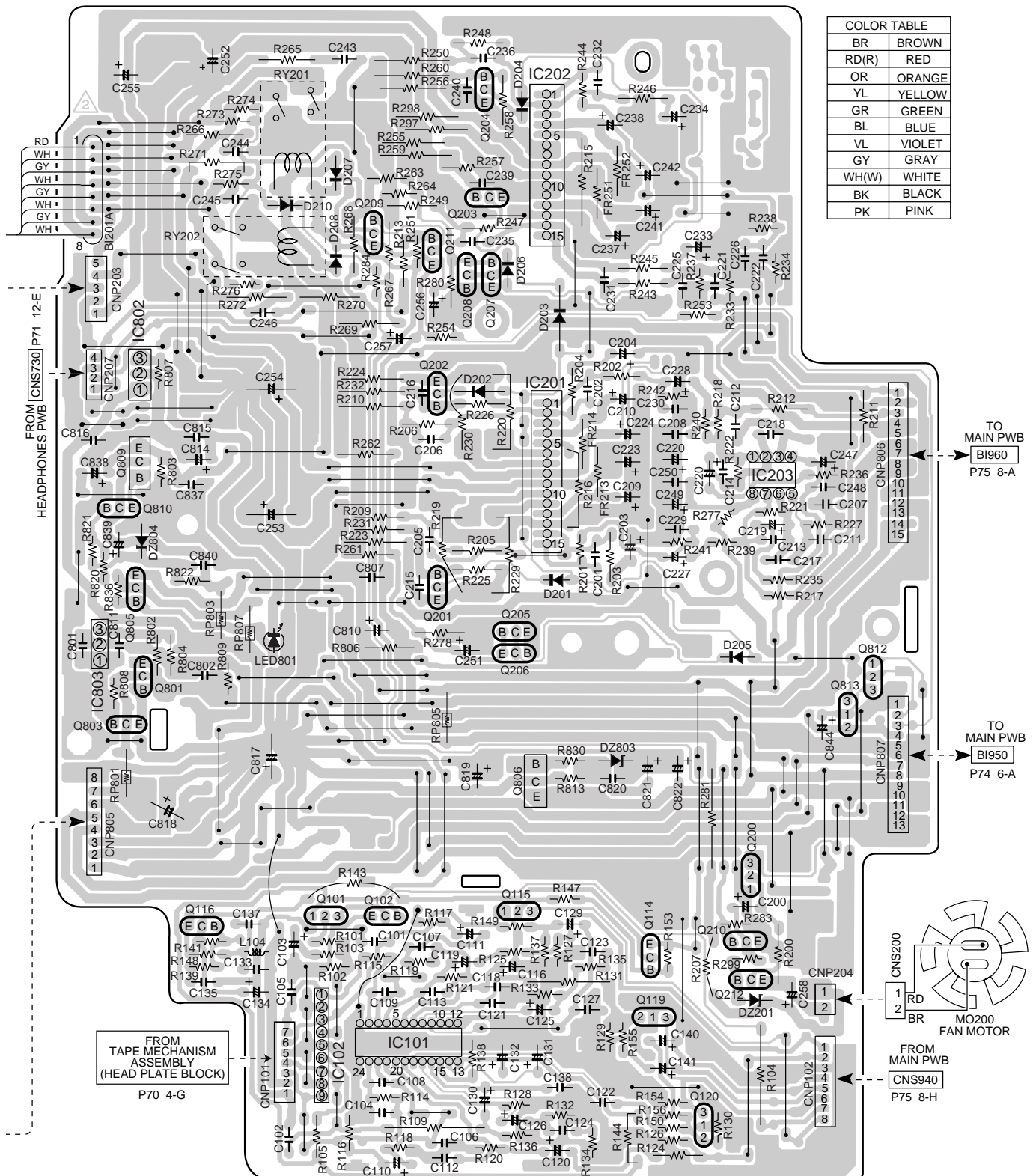


Figure 79 WIRING SIDE OF P.W.BOARD (10/14)

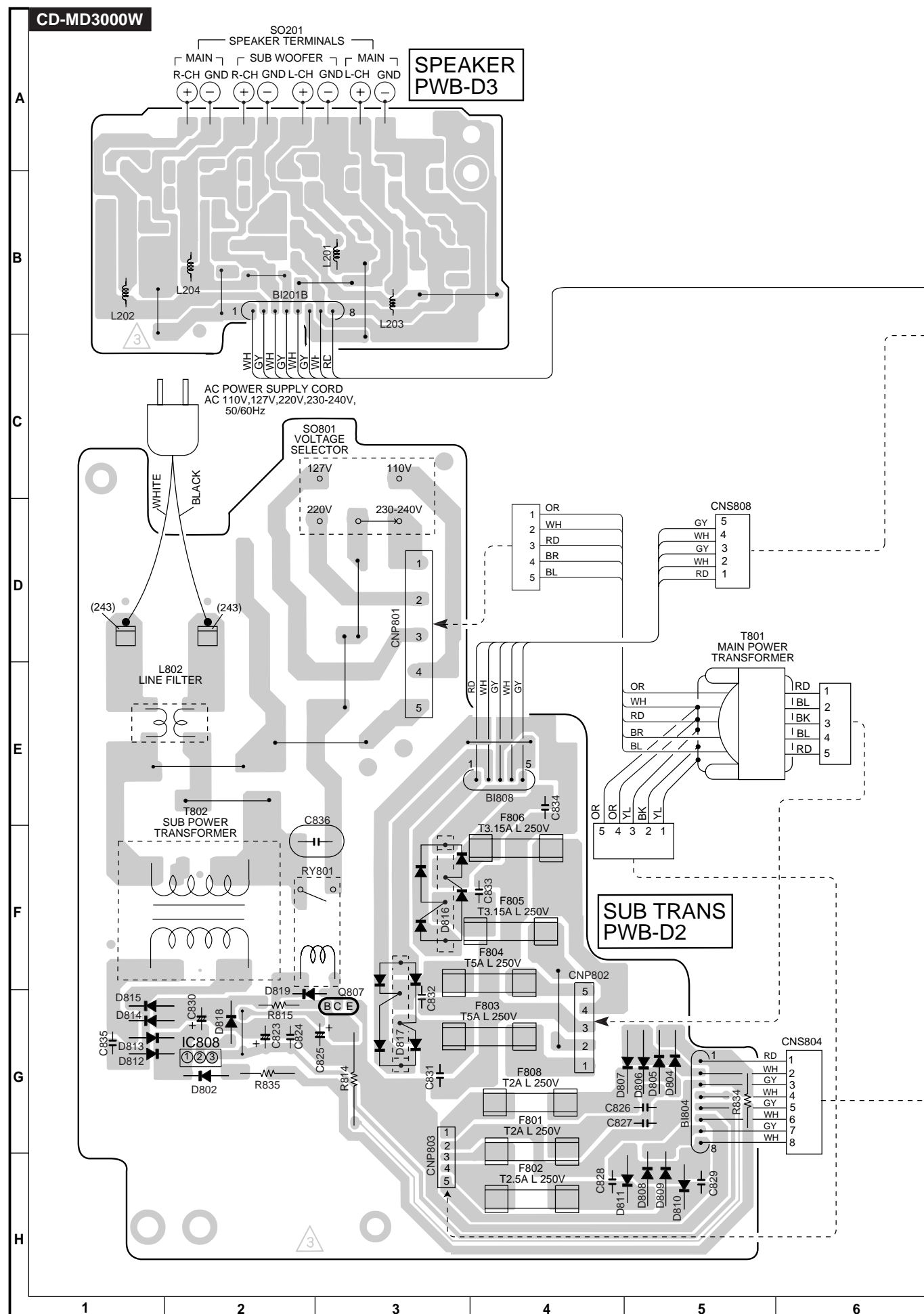
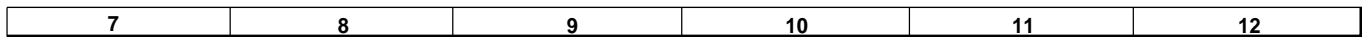
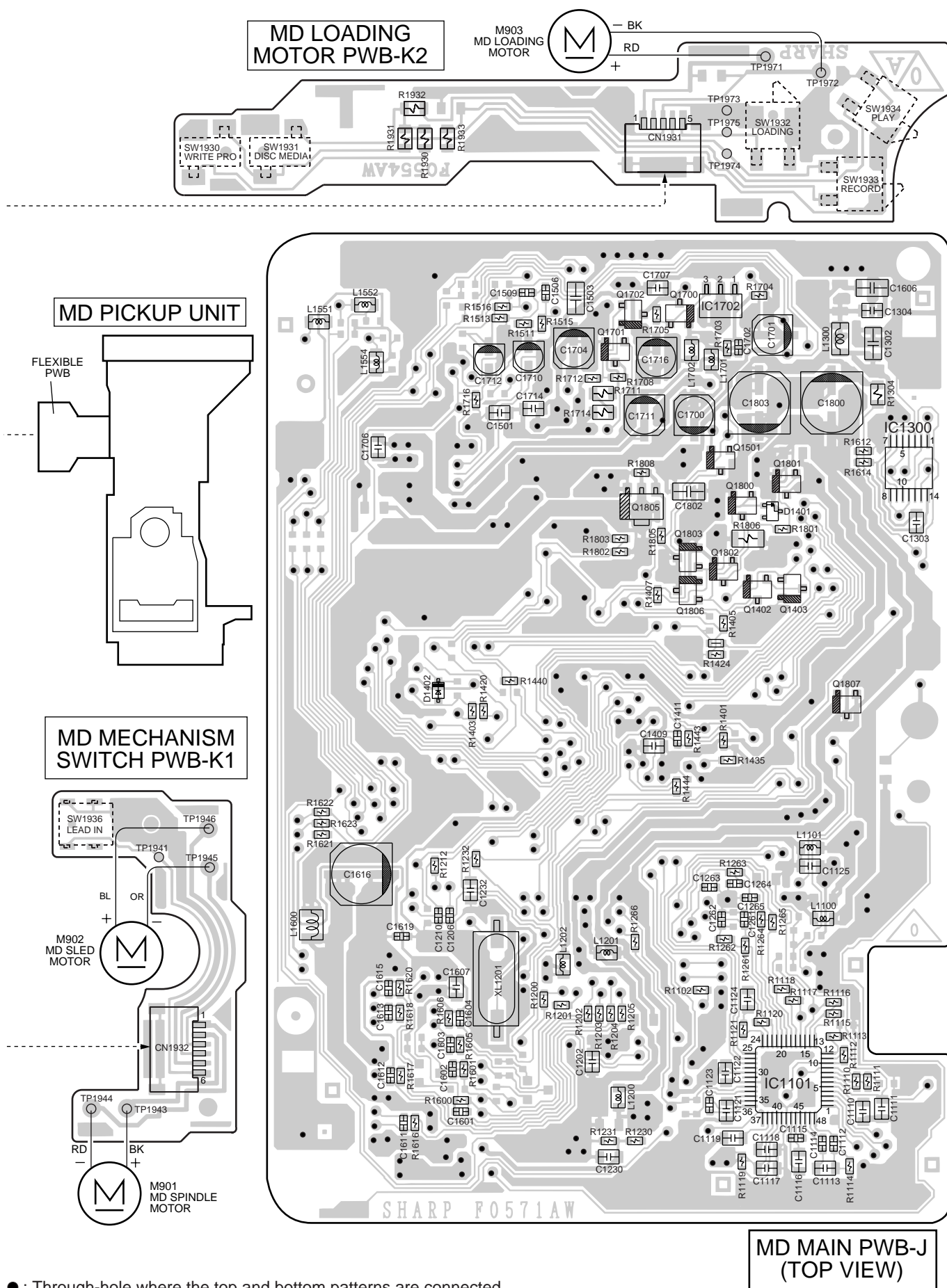


Figure 80 WIRING SIDE OF P.W.BOARD (11/14)



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- : Through-hole where the top and bottom patterns are connected.
- The numbers ① to ③⑥ are waveform numbers shown in page 86 and 87.

7	8	9	10	11	12
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Figure 83 WIRING SIDE OF P.W.BOARD (14/14)

TYPES OF TRANSISTOR AND LED

FRONT VIEW

E

C

B

(S)

(G)

(D)

(1)

(2)

(3)

2SA1015 GR
2SA562 Y
2SB561 C
2SB562 C
2SC1740 R
2SC380 O
(CD-MD3000H Only)
DTC363 TS
KRA102 M
KRA107 M
KRC102 M
KRC104 M
KRC107 M
KTA1046 Y
KTA1266 GR
KTC2026
KTC3194 Y
(CD-MD3000W Only)
KTC3203 Y
KTC3199 GR

C

FRONT VIEW

B

E

2SA1242 Y

FRONT VIEW

B

C

E

2SD2012

FRONT VIEW

B

C

E

2SA1314 C

FRONT VIEW

1

2

3

4

5

1:Cathode

2:Cathode

3:Anode

4:No Contact

5:Anode

SBE803

FRONT VIEW

1

2

3

1:Cathode

2:Cathode

3:Anode

4:No Contact

5:Anode

SVC211C
SVC348S

FRONT VIEW

1

2

3

1:Cathode

2:Cathode

3:Anode

4:No Contact

5:Anode

SB00703Q

TOP VIEW

1

2

3

DS1SS133

TOP VIEW

1

2

3

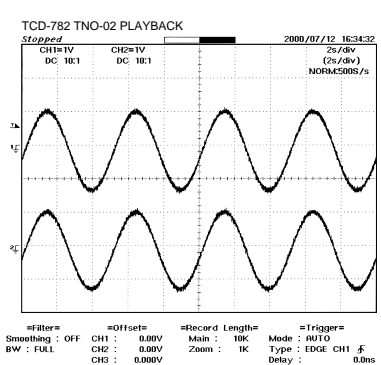
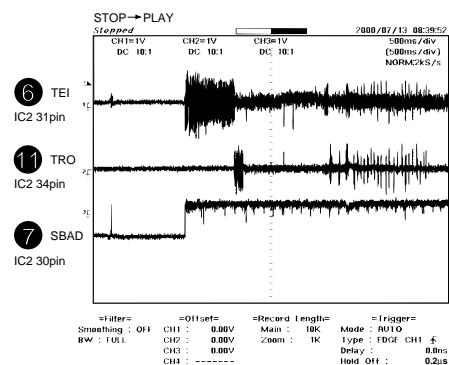
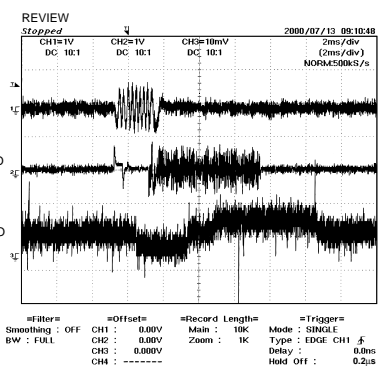
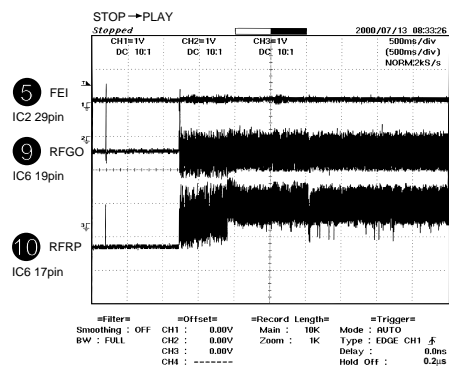
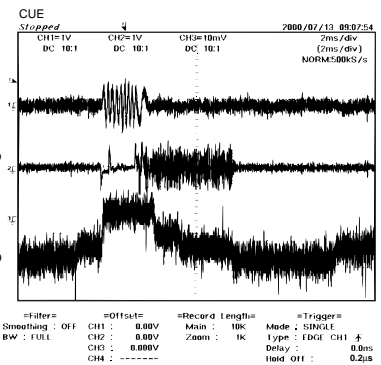
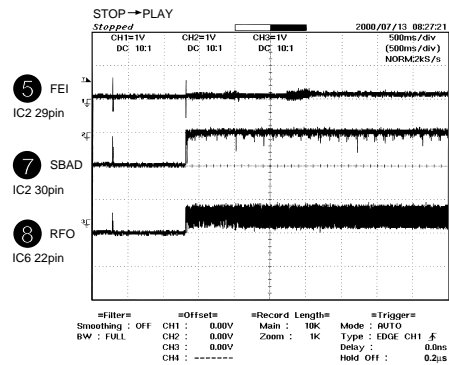
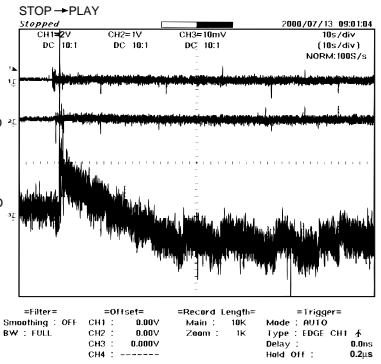
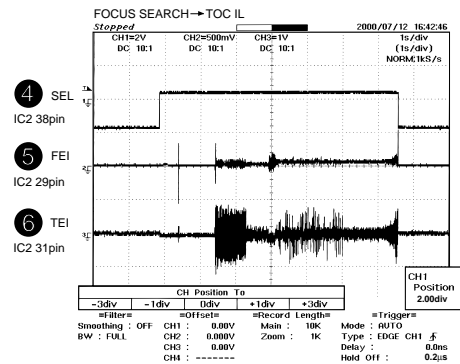
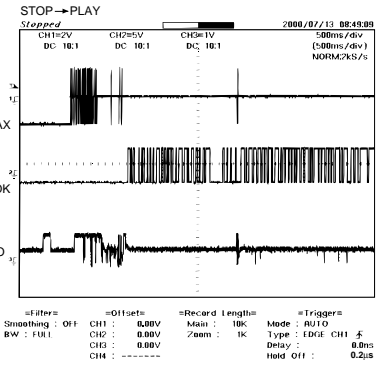
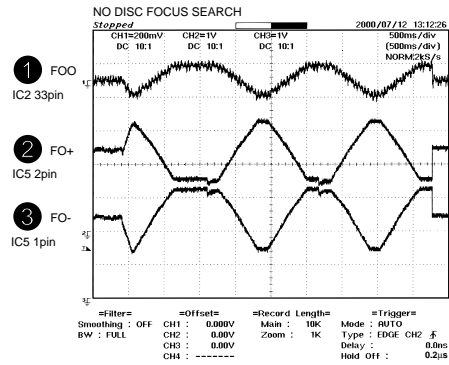
1N4004S
1SS355

VOLTAGE

IC1101		IC1201				IC1202		IC1601		IC1401				IC1402		IC1702	
PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	0.7V	1	1.3V	51	1.6V	1	1.3V	1	1.6V	1	0V	51	0V	1	0V	1	2.46V
2	0.7V	2	2.6V	52	0V	2	1.8V	2	1.6V	2	0V	52	0V	2	0V	2	0V
3	0.7V	3	1.3V	53	0V	3	3.1V	3	1.6V	3	0V	53	0V	3	0V	3	3.85V
4	0.7V	4	0V	54	0V	4	2.3V	4	5.0V	4	0.4V	54	0.2V	4	0V	IC1801	
5	1.3V	5	2.6V	55	3.2V	5	1.3V	5	5.0V	5	0V	55	0V	5	3.2V	PIN NO.	VOLTAGE
6	1.3V	6	1.3V	56	0V	6	1.7V	6	0V	6	0V	56	0V	6	3.2V	1	0V
7	1.3V	7	1.3V	57	3.2V	7	0.7V	7	0V	7	3.2V	57	0V	7	3.2V	2	5.0V
8	1.3V	8	1.3V	58	3.2V	8	0.7V	8	1.6V	8	0V	58	0V	8	3.2V	3	3.2V
9	1.3V	9	1.3V	59	3.2V	9	0.7V	9	2.5V	9	0V	59	0V	IC1701		4	3.1V
10	1.3V	10	1.3V	60	3.2V	10	3.2V	10	2.5V	10	0V	60	0V	PIN NO.	VOLTAGE	5	0V
11	1.3V	11	1.3V	61	0V	11	0.7V	11	0V	11	0V	61	0V	1	0V	IC1802	
12	1.3V	12	1.3V	62	2.5V	12	1.1V	12	2.5V	12	3.2V	62	3.2V	2	3.2V	PIN NO.	VOLTAGE
13	1.3V	13	2.6V	63	0V	13	1.1V	13	2.5V	13	1.5V	63	3.2V	3	1.6V	1	0V
14	1.3V	14	2.6V	64	1.0V	14	1.1V	14	2.5V	14	0V	64	0V	4	1.6V	2	3.2V
15	1.3V	15	0V	65	1.0V	15	1.1V	15	2.5V	15	1.6V	65	3.2V	5	1.6V	3	2.6V
16	1.3V	16	0V	66	1.6V	16	2.3V	16	1.6V	16	3.2V	66	3.2V	6	0V		
17	1.3V	17	1.6V	67	1.6V	17	2.5V	17	1.6V	17	3.2V	67	3.2V	7	3.2V		
18	1.3V	18	1.6V	68	0V	18	1.8V	18	1.6V	18	3.2V	68	0V	8	0V		
19	1.3V	19	1.6V	69	0V	19	1.9V	19	1.2V	19	3.2V	69	0V	9	0V		
20	1.3V	20	1.6V	70	1.6V	20	0V	20	1.2V	20	0V	70	3.1V	10	3.2V		
21	1.3V	21	1.6V	71	1.6V	IC1300		21	1.6V	21	0V	71	0V	11	0V		
22	1.3V	22	1.6V	72	1.6V	PIN NO.	VOLTAGE	22	1.6V	22	3.2V	72	0V	12	3.2V		
23	1.3V	23	1.6V	73	0V	1	(2.6V)	23	1.6V	23	0V	73	0V	13	3.2V		
24	0.7V	24	1.6V	74	0V	2	(2.6V)	24	0V	24	0V	74	3.2V	14	3.2V		
25	1.5V	25	1.6V	75	1.6V	3	(0.1V)	25	3.2V	25	2.9V	75	3.2V	15	3.2V		
26	0V	26	0.7V	76	1.6V	4	(2.6V)	26	3.2V	26	3.2V	76	0V	16	0V		
27	3.2V (0V)	27	0.7V	77	1.6V	5	(2.6V)	27	1.6V	27	3.2V	77	0V	17	1.6V		
28	2.6V	28	0.7V	78	0V	6	(0.1V)	28	1.6V	28	0V	78	0V	18	0V		
29	2.6V	29	1.7V	79	3.2V	7	(0V)	29	0V	29	3.2V	79	0V	19	0V		
30	1.3V	30	1.3V	80	3.2V	8	(1.4V)	30	1.6V	30	3.2V	80	3.2V	20	0V		
31	0V	31	3.2V	81	3.2V	9	(0.1V)	31	2.5V	31	1.5V	81	0V	21	0V		
32	1.3V	32	0.7V	82	3.2V	10	(2.6V)	32	2.5V	32	0V	82	0V	22	0V		
33	1.3V	33	1.1V	83	0V	11	(1.4V)	33	0V	33	2.6V	83	0V	23	0V		
34	0V	34	1.1V	84	0V	12	(0.1V)	34	2.5V	34	0.8V	84	3.2V	24	0V		
35	1.3V	35	1.1V	85	1.6V	13	(2.6V)	35	2.5V	35	3.2V	85	0V	25	0V		
36	1.3V	36	1.1V	86	3.2V	14	(5.0V)	36	1.6V	36	3.2V	86	3.2V	26	0V		
37	1.3V	37	2.3V	87	3.2V	IC1301		37	1.6V	37	0V	87	3.2V	27	0V		
38	1.3V	38	0V	88	0V	PIN NO.	VOLTAGE	38	5.0V	38	0V	88	3.2V	28	1.6V		
39	0V	39	2.5V	89	3.2V	1	(5.0V)	39	5.0V	39	0V (3.2V)	89	2.0V				
40	2.6V	40	1.8V	90	0.2V	2	(1.4V)	40	1.6V	40	3.2V	90	1.8V				
41	1.6V	41	1.9V	91	0V	3	(1.4V)	41	5.0V	41	0V	91	2.2V				
42	0V	42	1.3V	92	0V	4	(2.5V)	42	0.9V	42	0V	92	1.5V				
43	1.3V	43	2.3V	93	0V	5	(2.5V)	IC1302		43	0V	93	0.7V				
44	1.1V	44	3.1V	94	0V	6	(1.4V)	PIN NO.	VOLTAGE	44	3.2V	94	0V				
45	0.7V	45	1.8V	95	0.1V	7	(1.4V)	1	(1.5V)	45	3.2V	95	0V				
46	1.3V	46	1.3V	96	0V	8	(5.0V)	2	(1.5V)	46	3.2V	96	0V				
47	0.7V	47	1.3V	97	0V			3	(2.5V)	47	0V	97	0V				
48	0V	48	3.0V	98	3.2V			4	(0V)	48	0V	98	3.2V				
		49	2.6V	99	3.2V			5	(2.5V)	49	0.1V	99	3.2V				
		50	1.4V	100	0V					50	0V	100	0V				

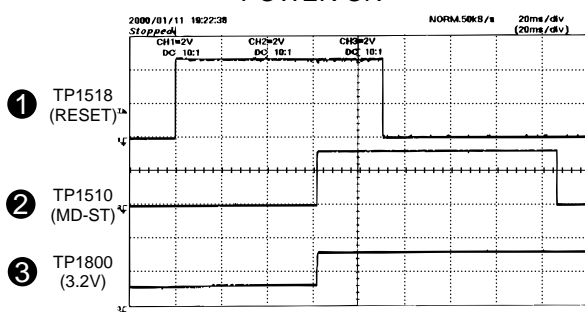
():REC MODE

WAVEFORMS OF CD CIRCUIT

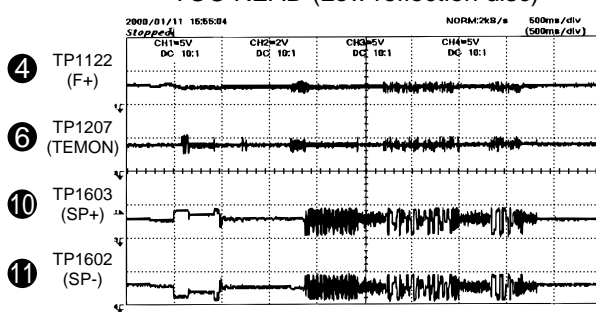


WAVEFORMS OF MD CIRCUIT

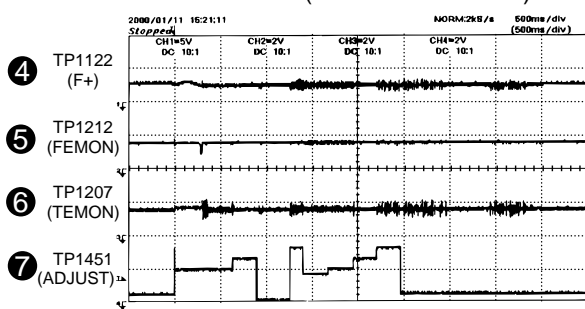
POWER ON



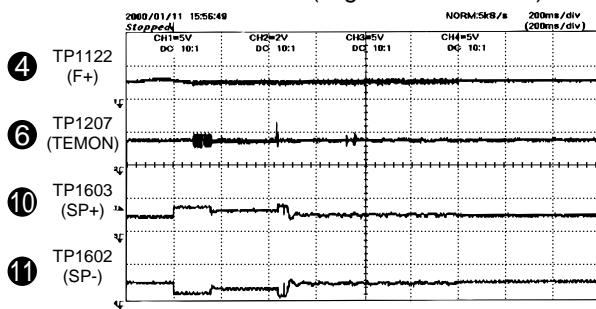
TOC READ (Low reflection disc)



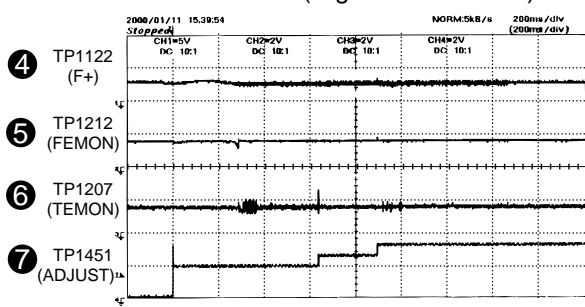
TOC READ (Low reflection disc)



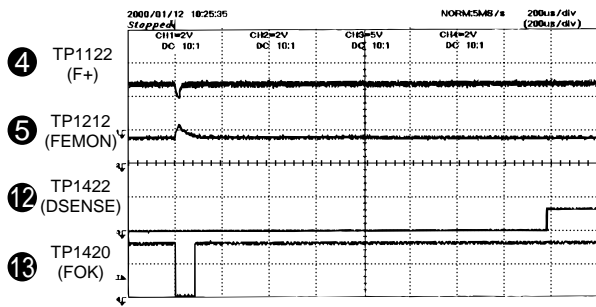
TOC READ (High reflection disc)



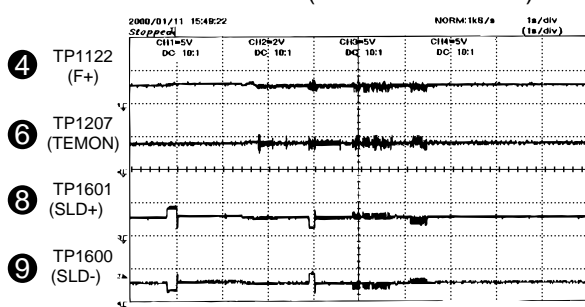
TOC READ (High reflection disc)



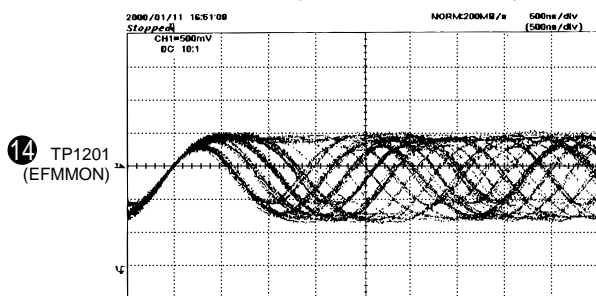
STOP → PLAY



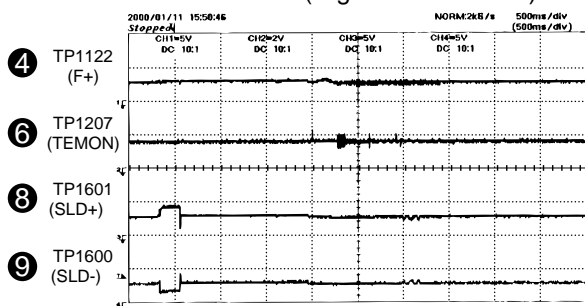
TOC READ (Low reflection disc)



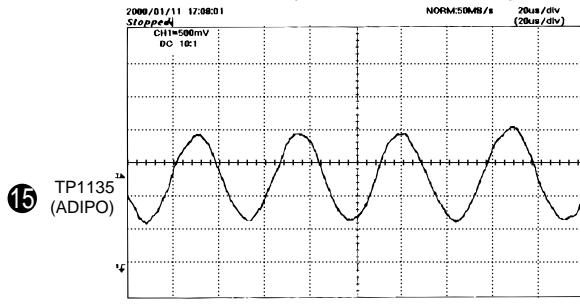
PLAY (Low reflection disc)



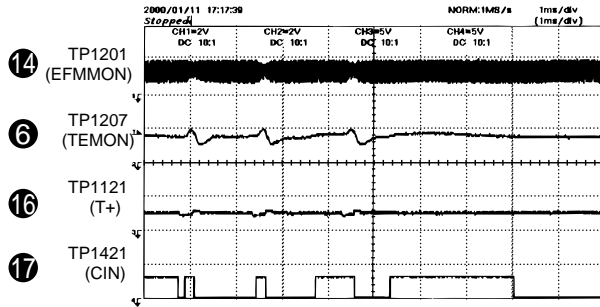
TOC READ (High reflection disc)



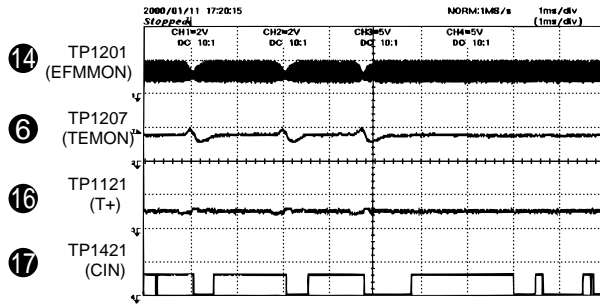
PLAY (Low reflection disc)



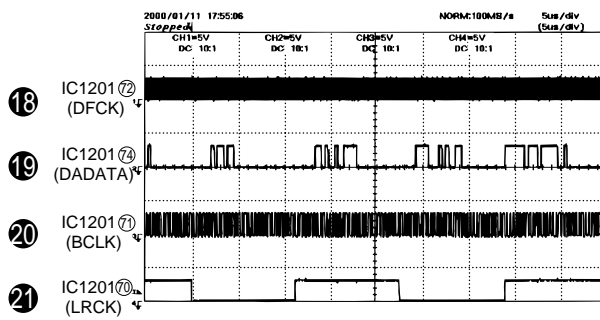
PLAY (Low reflection disc)



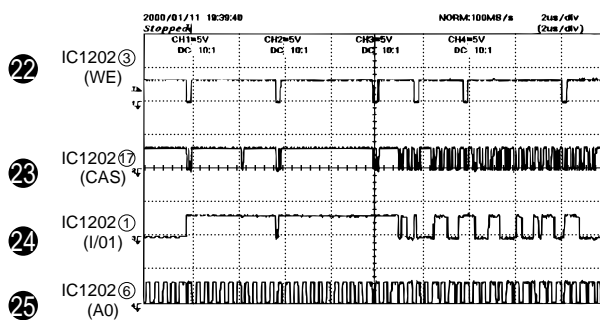
PLAY (High reflection disc)



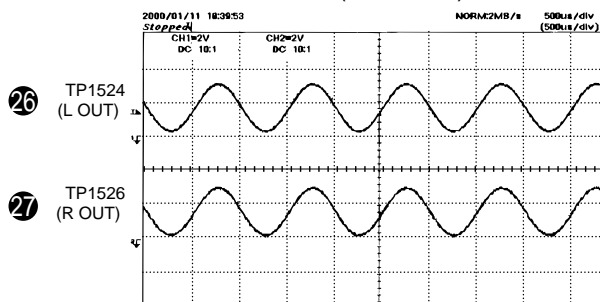
PLAY



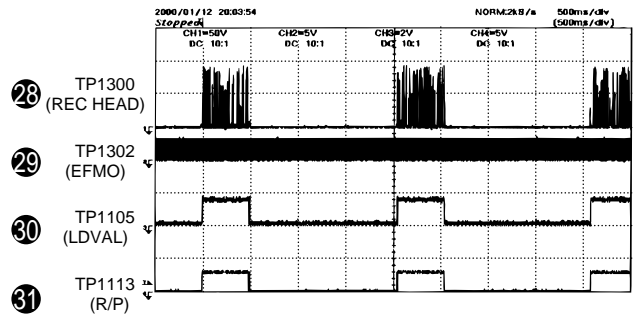
PLAY



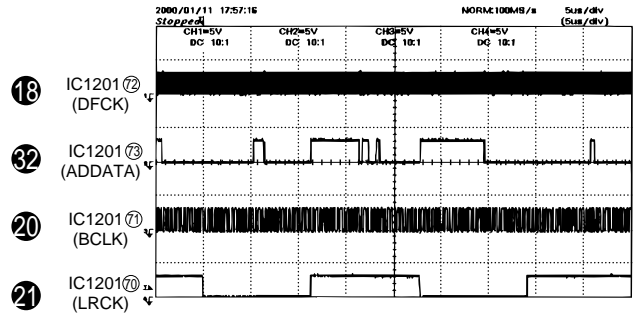
PLAY(1kHz 0dB)



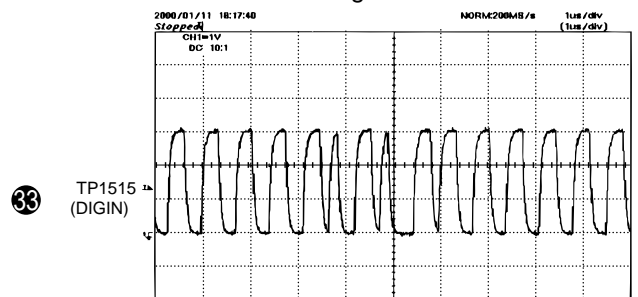
REC



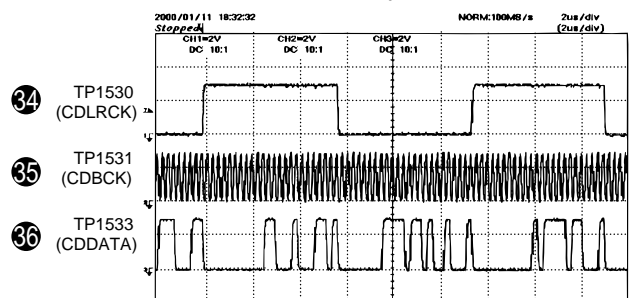
Analog REC



Digital REC



Double speed REC



TROUBLESHOOTING

CD SECTION

When the CD does not function

When the CD section does not operate when the objective lens of the optical pickup is dirty, this section may not operate. Clean the objective lens, and check the playback operation. When this section does not operate even after the above step is taken, check the following items.

Remove the cabinet and follow the troubleshooting instructions.

"Track skipping and/or no TOC (Table Of Contents) may be caused by build up of dust other foreign matter on the laser pickup lens. Before attempting any adjustment make certain that the lens is clean. If not, clean it as mentioned below."

Turn the power off.

Gently clean the lens with a lens cleaning tissue and a small amount of isopropyl alcohol.

Do not touch the lens with the bare hand.

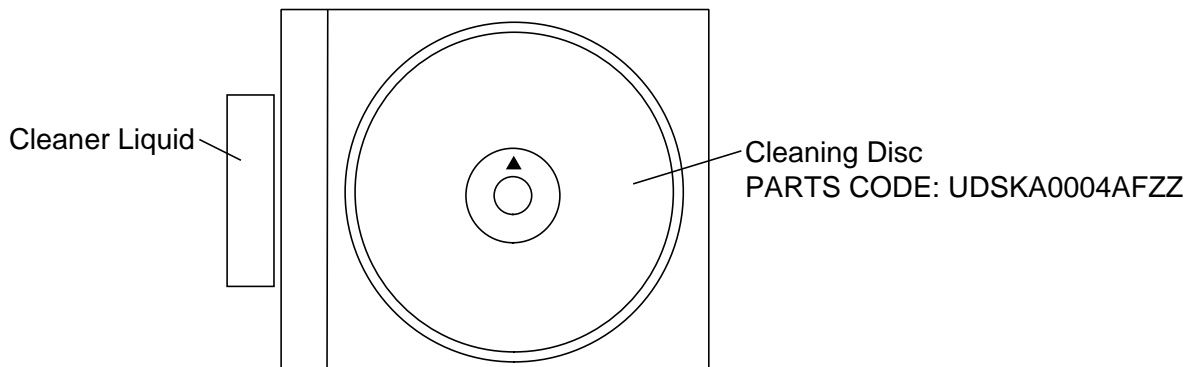
Dust gradually accumulates on the objective lens during use, and it may degrade performance. To avoid this problem, use a cleaning disc designed for CD optical pickup lenses.

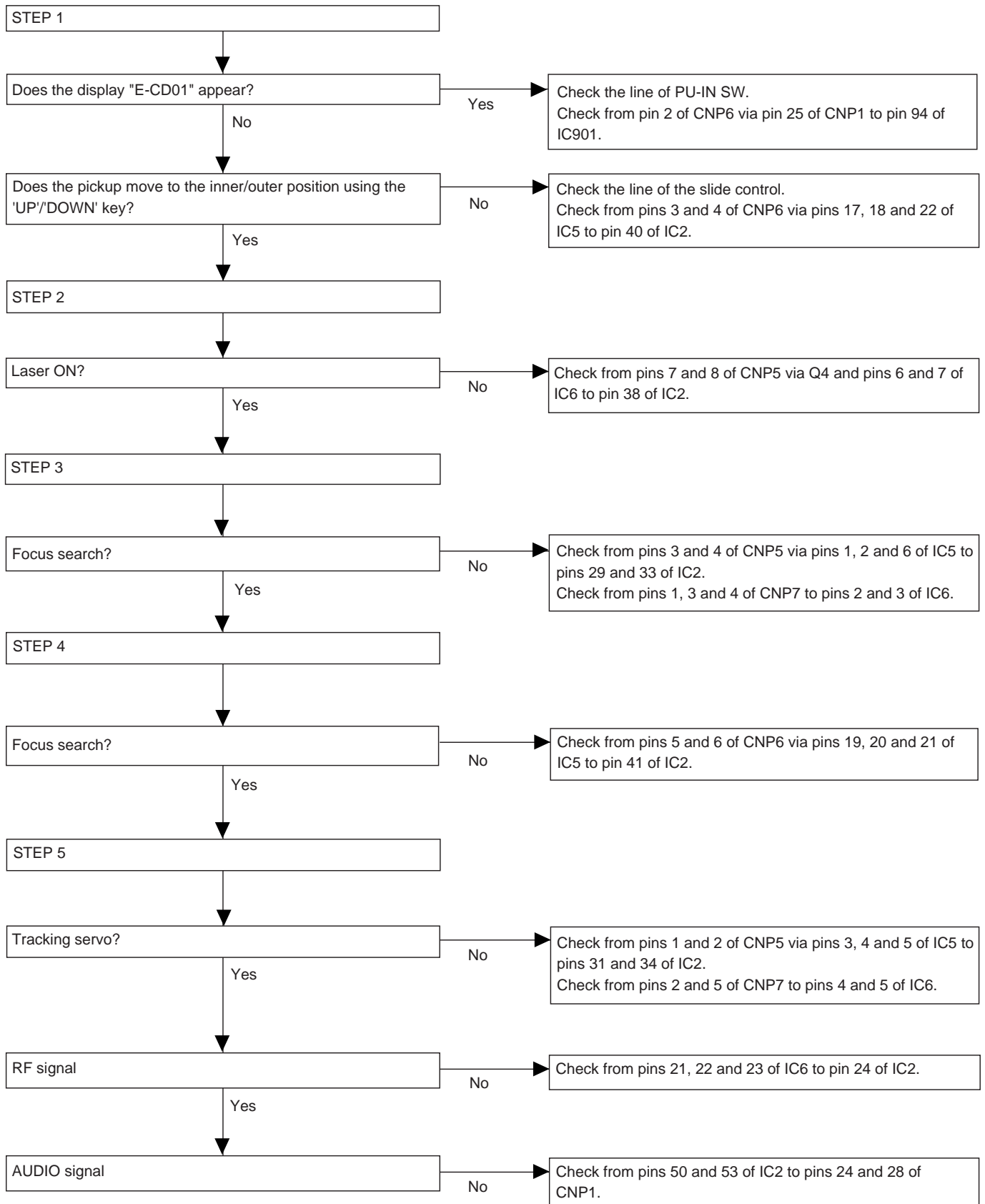
HOW TO USE

1. Using the brush in the cleaner cap, apply 1 or 2 drops of the cleaning fluid to the brush on the CD cleaner disc which has the ▲ mark next to it.
2. Place the CD cleaner disc onto the CD disc tray with the brush side down, then press the play button.
3. You will hear music for about 20 seconds and the CD player will automatically stop. If it continues to turn, press the stop button.

CAUTION

- The CD lens cleaner should be effective for 30~50 operations, however if the brushes become worn out earlier then please replace the cleaner disc.
- If the CD cleaner brushes become very wet then wipe off any excess fluid with a soft cloth.
- Do not drink the cleaner fluid or allow it to come in contact with the eyes. In the event of this happening then drink and / or rinse with clean water and seek medical advice.
- The CD cleaner disc must not be used on car CD players or on computer CD-ROM drives.
- All rights reserved. Unauthorized duplicating, broadcasting and renting this product is prohibited by law.



Check in the CD test mode.

CD-MD3000H/CD-MD3000W

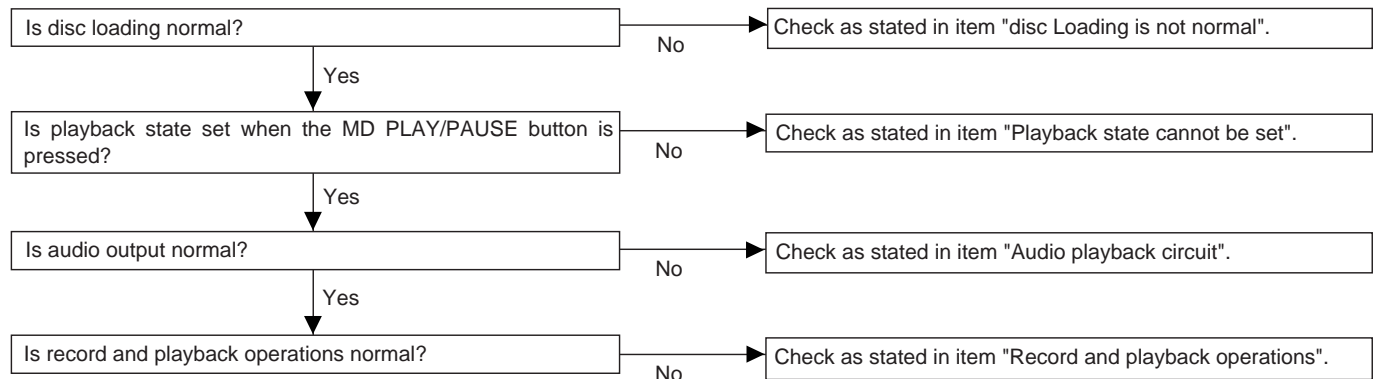
MD SECTION

When MD fails to operate

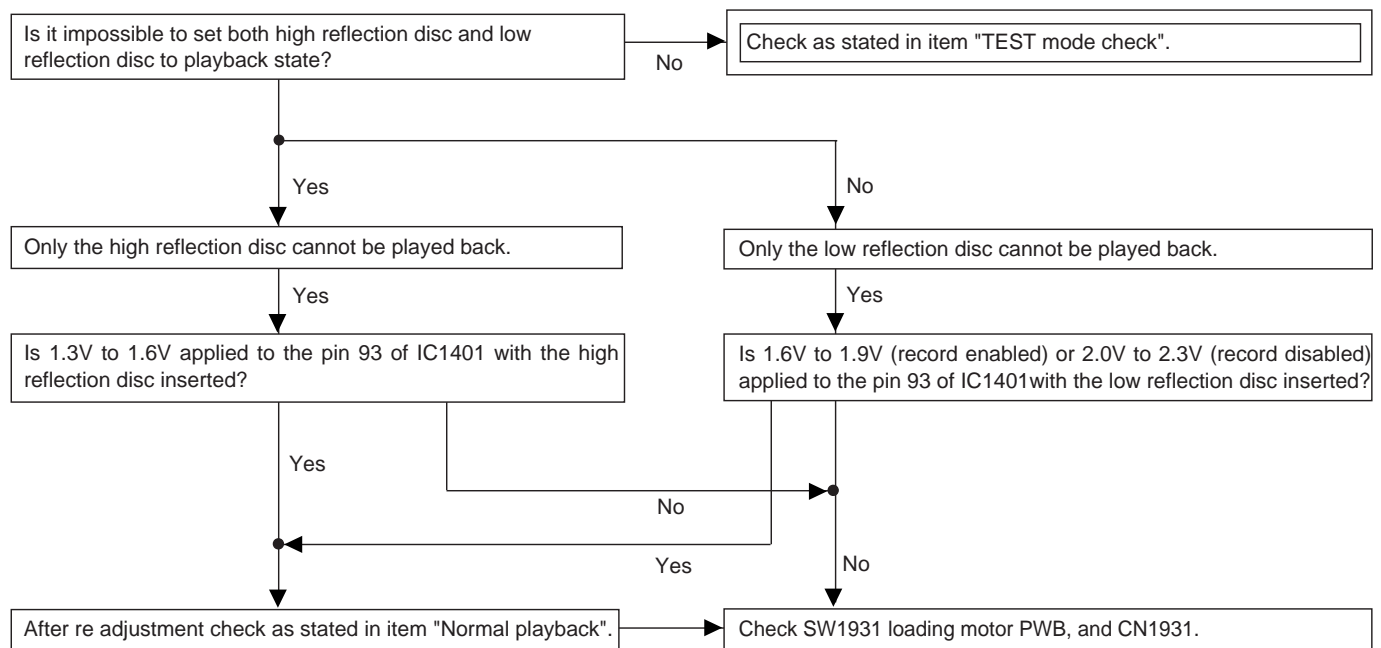
If the objective lens of optical pickup is contaminated, MD may fail to operate. At first, clean the objective lens to check playback operation. If MD fails persistently to operate, perform checks as follows.

If dust or foreign substance is accumulated on the pickup lens, playback is disturbed and indication of TOC (content of tracks) may be disabled. Before adjusting check that the lens is clean. If the lens is contaminated, treat it as follows.

Turn off power supply, impregnate the lens cleaning paper with a small quantity of isopropyl alcohol, and gently wipe the lens with it with due care so that the lens is not damaged. At this time do not touch the lens directly with your finger.

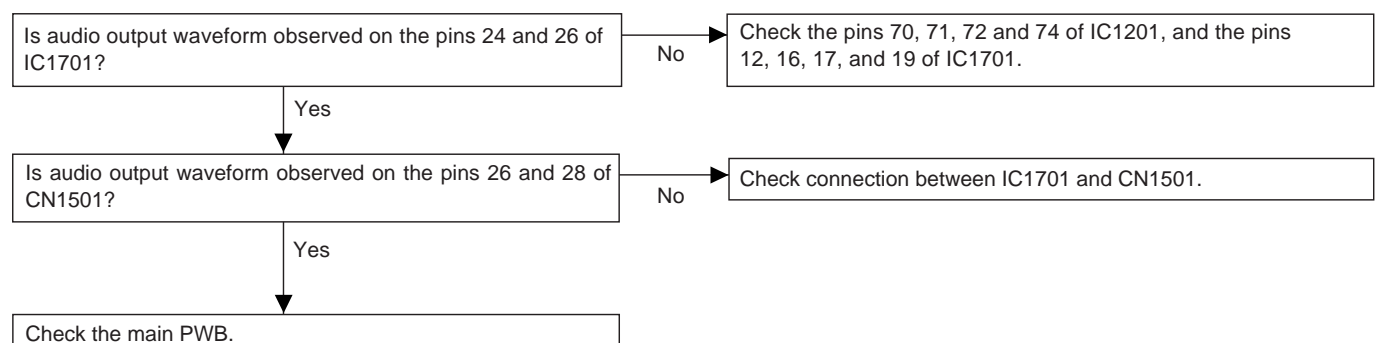


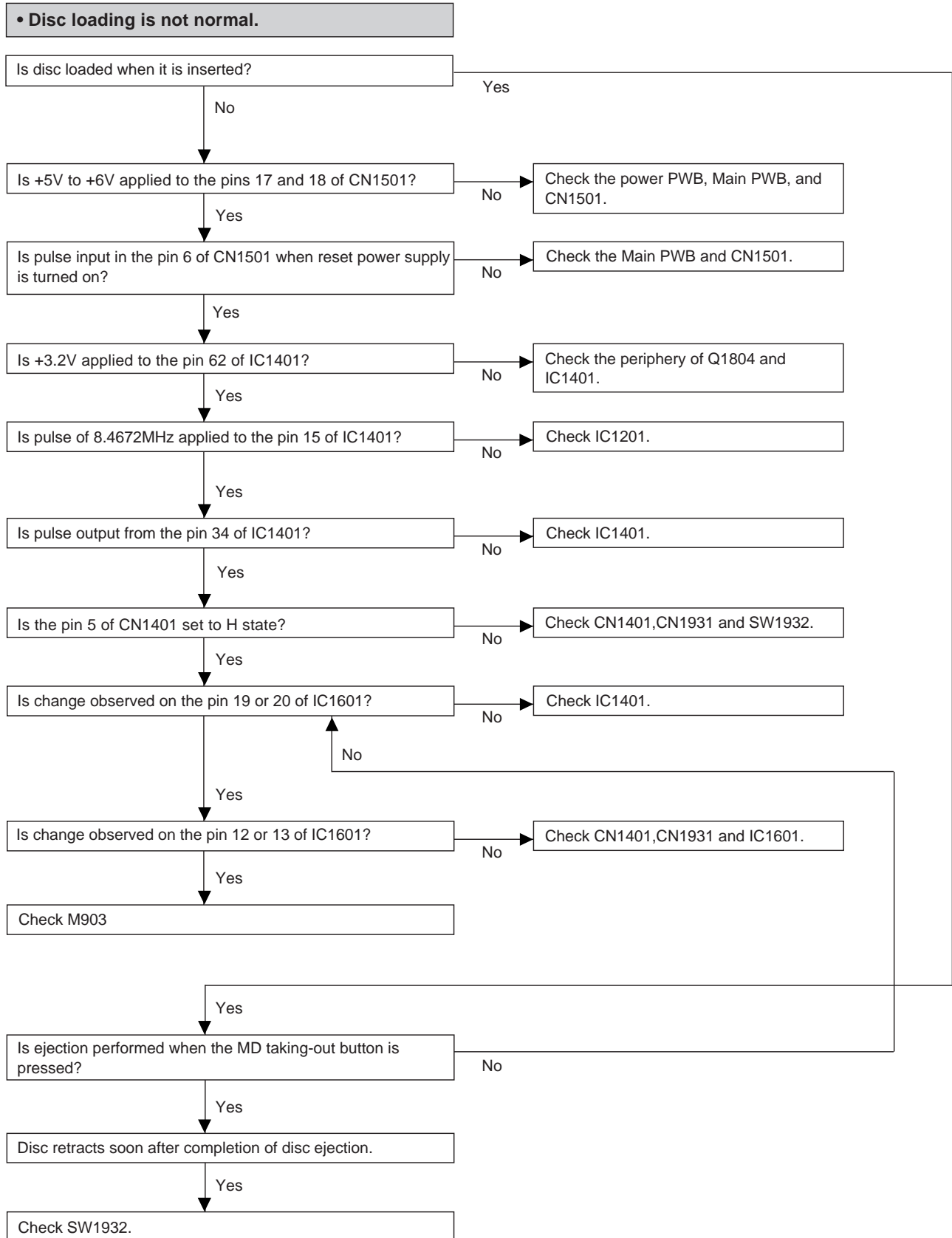
• Playback state cannot be set.



• Audio playback circuit

When sound is not output although the playback time display advances during playback in the normal mode.

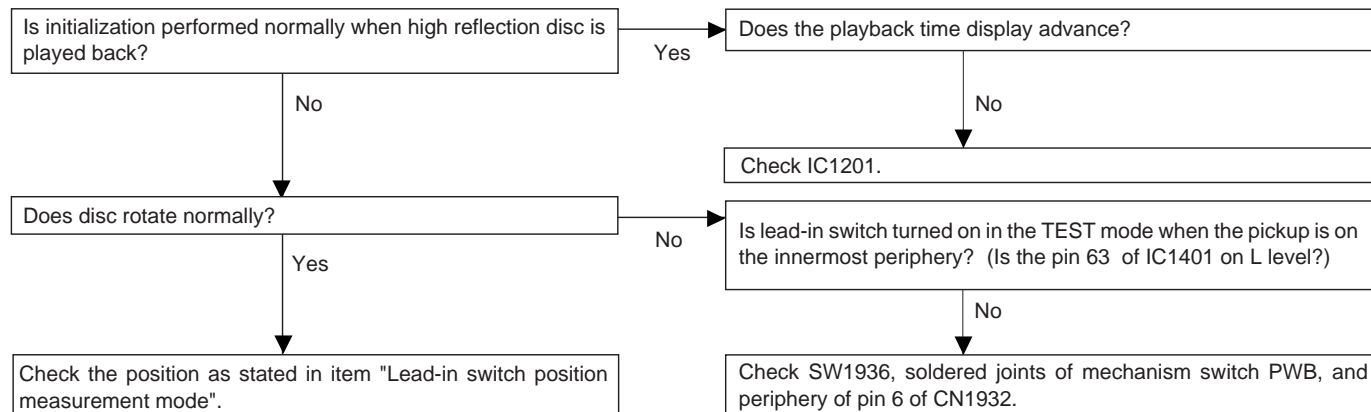




CD-MD3000H/CD-MD3000W

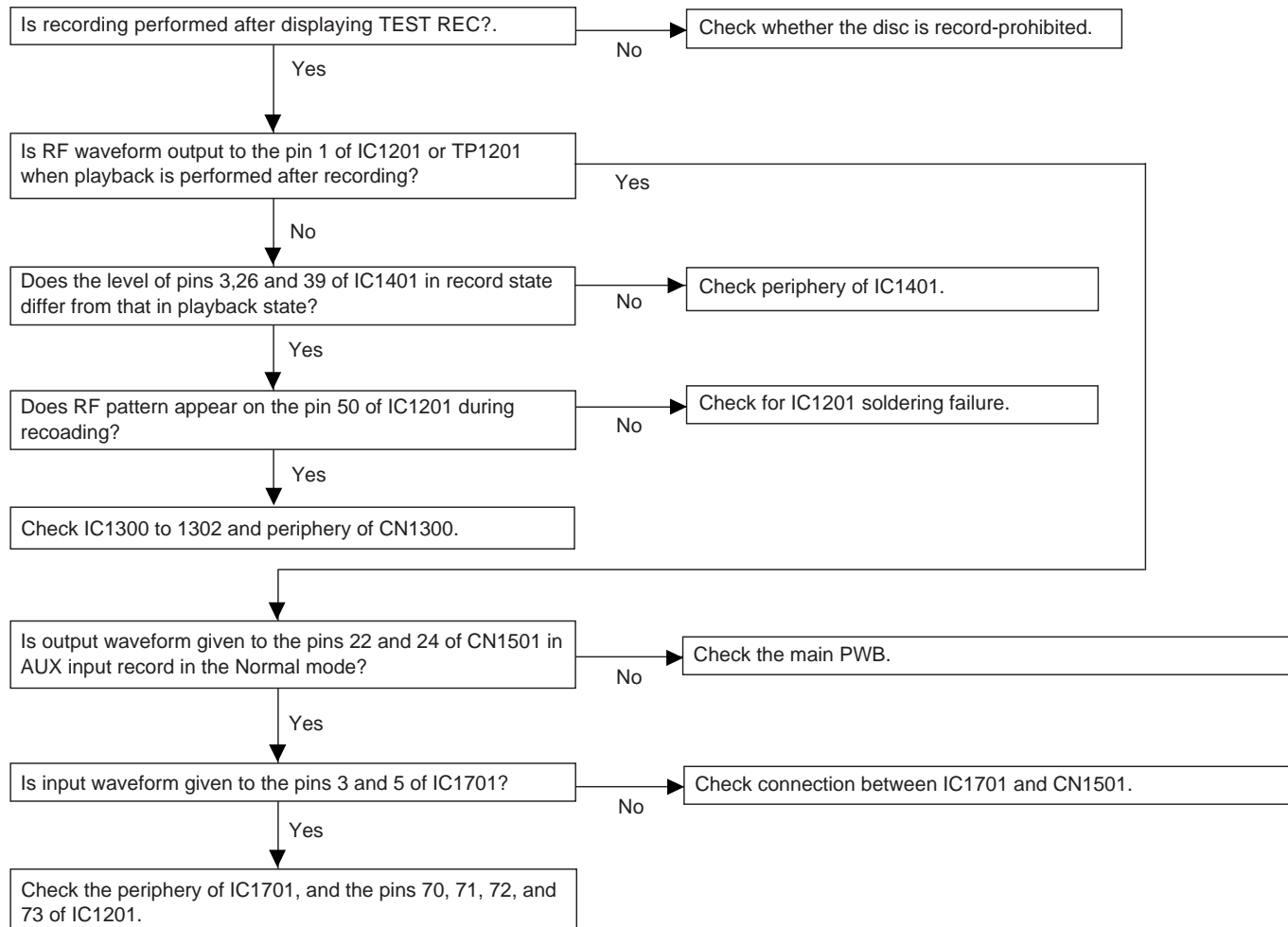
• Normal playback

When it has been confirmed that EEPROM value is normal in the TEST mode

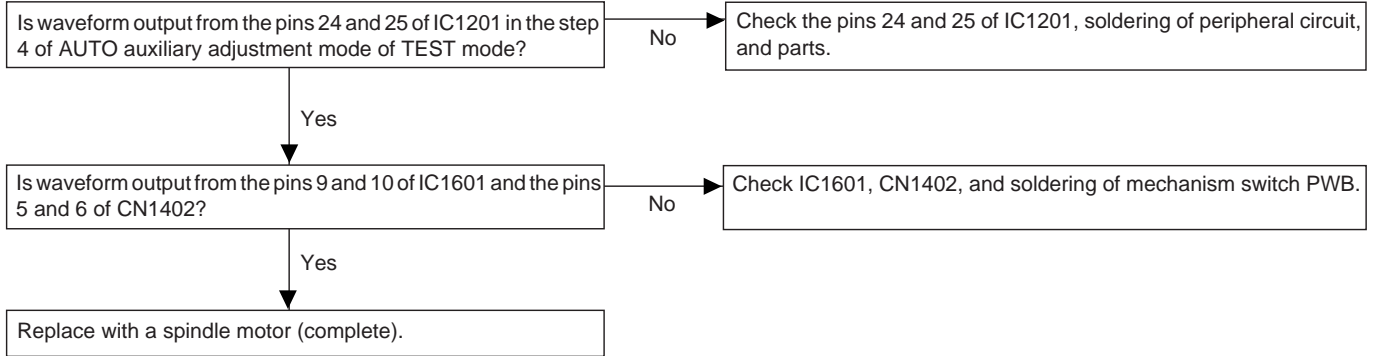


• Record and playback operations

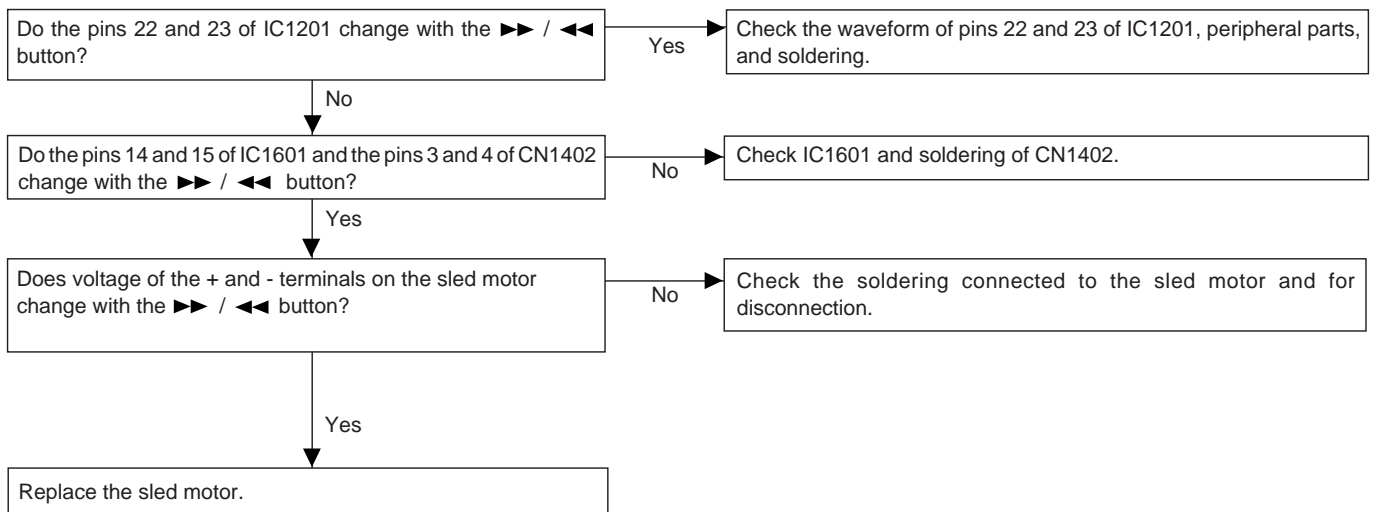
Insert the low reflection disc, and after verifying the audio output in the normal mode playback set the record/playback TEST mode.



• The spindle motor does not rotate.



• The sled motor does not rotate.



FUNCTION TABLE OF IC

IC2 VHiTC9490F/-1: Servo/Signal Control (TC9490F) (1/2)

Pin No.	Terminal Name	Input/Output	Function															
1	BCK	Output	Bit clock output terminal. 32fs, 48fs or 64fs can be selected by command.															
2	LRCK	Output	L/R channel clock output terminal. L channel: "L", R channel: "H". the output polarity can be inverted by command.															
3	AOUT	Output	Audio data output terminal. MSB/LSB fast can be selected by command.															
4	DOUT	Output	Digital out output terminal. Up to double speed can be output.															
5*	IPF	Output	Correction flag output terminal. When the correction impossible symbol appears if the AOUT output corresponds to the C2 correction output: "H".															
6	VDD3	—	Digital 3.3V power supply terminal.															
7	VSS3	—	Digital GND terminal.															
8*	SBOK	Output	Subcode Q data CRCC decision result output terminal. When the decision result is OK: "H".															
9*	CLKK	Input/Output	Clock input/output terminal for subcodes P-W data reading. The input/output polarity can be selected by command.															
10*	DATA	Output	Subcodes P-W data output terminal.															
11*	SFSY	Output	Playback system frame sync signal output terminal.															
12*	SBSY	Output	Subcode block sync output terminal. In the S1 position when the subcode sync is detected: "H".															
13 14*	/HSO /UHSO	Output Output	Playback speed mode flag output terminal. <table><tr><td>/UHSO</td><td>/HSO</td><td>Playback speed</td></tr><tr><td>H</td><td>H</td><td>Normal speed playback</td></tr><tr><td>H</td><td>L</td><td>Double speed playback</td></tr><tr><td>L</td><td>L</td><td>4-time speed playback</td></tr><tr><td>—</td><td>—</td><td>—</td></tr></table>	/UHSO	/HSO	Playback speed	H	H	Normal speed playback	H	L	Double speed playback	L	L	4-time speed playback	—	—	—
/UHSO	/HSO	Playback speed																
H	H	Normal speed playback																
H	L	Double speed playback																
L	L	4-time speed playback																
—	—	—																
15	PVDD3	—	3.3V power supply terminal for PLL system.															
16	PDO	Output	EFM signal/PLCK signal phase error signal output terminal.															
17	TMAX	Output	TMAX detection result output terminal. <table><tr><td>TMAX detection result</td><td>TMAX output</td></tr><tr><td>Longer than the specified period</td><td>"PVDD3"</td></tr><tr><td>Within the specified period</td><td>"Hi-z"</td></tr><tr><td>Shorter than the specified period</td><td>"AVSS3"</td></tr></table>	TMAX detection result	TMAX output	Longer than the specified period	"PVDD3"	Within the specified period	"Hi-z"	Shorter than the specified period	"AVSS3"							
TMAX detection result	TMAX output																	
Longer than the specified period	"PVDD3"																	
Within the specified period	"Hi-z"																	
Shorter than the specified period	"AVSS3"																	
18	LPFN	Input	Amp's inversion input terminal for PLL system low-pass filter.															
19	LPFO	Output	Amp's output terminal for PLL system low-pass filter.															
20	PVREF	—	VREF terminal only for PLL system.															
21	VCOF	Output	Filter terminal for VCO.															
22	AVSS3	—	Analog GND terminal.															
23	SLCO	Output	DAC output terminal for data slice level generation.															
24	RFI	Input	RF signal input terminal. Zin can be selected by command.															
25	AVDD3	—	Analog 3.3V power supply terminal.															
26	RFCT	Input	RFRP signal center level input terminal.															
27	RFZI	Input	Input terminal for RFRP signal zero crossing.															
28	RFRP	Input	RF ripple signal terminal.															
29	FEI	Input	Focus error signal input terminal.															
30	SBAD	Input	Sub-beam addition signal input terminal.															
31	TEI	Input	Tracking error input terminal. Fetch when the tracking servo is on.															
32	TEZI	Input	Input terminal for tracking error signal zero crossing.															
33	FOO	Output	Focus equalizer output terminal.															
34	TRO	Output	Tracking equalizer output terminal.															
35	VREF	—	Analog reference power supply terminal.															
36	RFGC	Output	RF amplitude adjustment control signal output terminal.															
37	TEBC	Output	Tracking balance control signal output terminal.															
38	SEL	Output	APC circuit ON/OFF signal output terminal. When the laser is on, UHS="L": "Hi-z", UHS="H": "H" output.															

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC2 VHiTC9490F/-1: Servo/Signal Control (TC9490F) (2/2)

Pin No.	Terminal Name	Input/Output	Function
39	AVDD3	—	Analog 3.3V power supply terminal.
40	FMO	Output	Feed equalizer output terminal.
41	DMO	Output	Disc equalizer output terminal.
42	VSS3	—	Digital GND terminal.
43	VDD3	—	Digital 3.3V power supply terminal.
44	TESIN	Input	Test input terminal. Usually "L" fixed.
45	XVSS3	—	GND terminal for system clock oscillation circuit.
46	XI	Input	System clock oscillation circuit input terminal.
47	XO	Output	System clock oscillation circuit output terminal.
48	XVDD3	—	3.3V power supply terminal for system clock oscillation circuit.
49	DVSS3	—	GND terminal for D/A converter.
50	RO	Output	R channel data normal rotation output terminal.
51	DVDD3	—	3.3V power supply terminal for D/A converter.
52	DVR	—	Reference voltage terminal.
53	LO	Output	L channel data normal rotation output terminal.
54	DVSS3	—	D/A converter section GND terminal.
55*	ZDET	Output	1-bit D/A converter 0 detection flag output terminal.
56	VSS5	—	GND terminal for microcomputer interface.
57-60	BUS0-BUS3	Input/Output	Data input/output terminal for microcomputer interface.
61	BUCK	Input	Clock input terminal for microcomputer interface.
62	/CCE	Input	Chip enable signal input terminal for microcomputer interface. In case of "L", BUS3-0 are active.
63	/RST	Input	Reset signal input terminal. Reset: "L".
64	VDD5	—	5V power supply terminal for microcomputer interface.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

Note: AI/F: Analog input/output terminal

3-5I/F: Terminal with a built-in 3-5 interface (5V system input/output terminal)

3I/F: 3V system input/output terminal

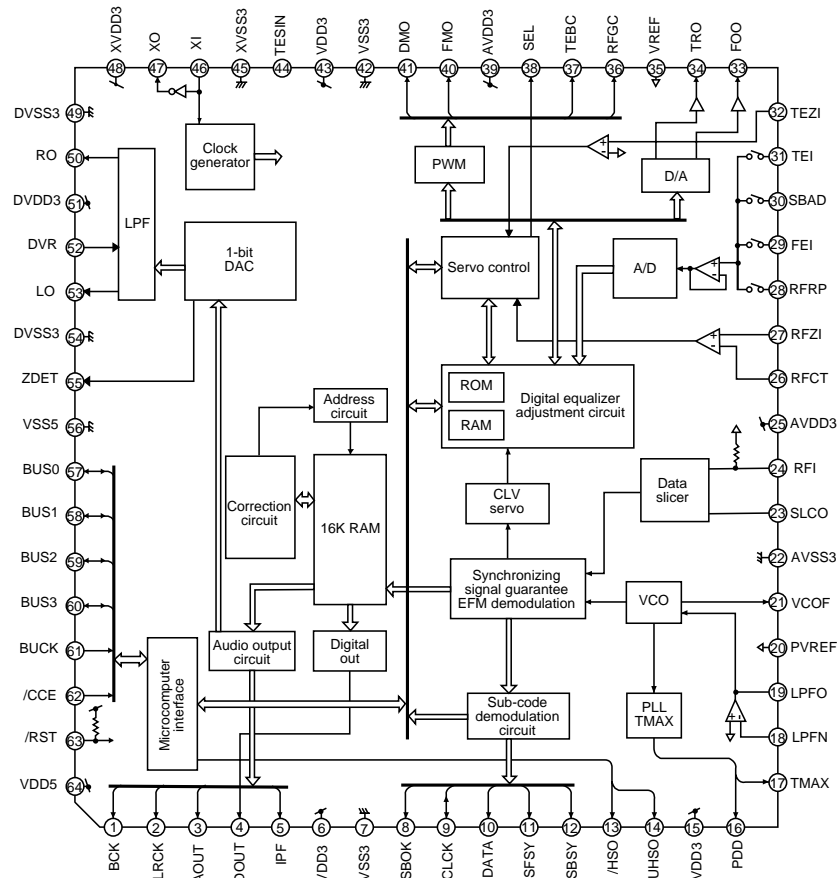


Figure 95 BLOCK DIAGRAM OF IC

CD-MD3000H/CD-MD3000W

IC6 VHiTA2147F/-1:Servo Pre Amp. (TA2147F)

Pin No.	Terminal Name	Input/Output	Function												
1	VCC	—	3.3V power supply terminal												
2	FNI	Input	Main beam amp input terminal												
3	FPI	Input	Main beam amp input terminal												
4	TPI	Input	Sub-beam amp input terminal												
5	TNI	Input	Sub-beam amp input terminal												
6	MDI	Input	Monitor photodiode amplifier input terminal												
7	LDO	Output	Laser diode amp output terminal												
8	SEL	Input	APC circuit ON/OFF signal, LDO terminal control input terminal and bottom/peak detection frequency switching terminal <table><tr><td>SEL</td><td>APC circuit</td><td>LDO</td></tr><tr><td>GND</td><td>OFF</td><td>Connection to VCC via 1kΩ</td></tr><tr><td>Hi-z</td><td>ON</td><td>Control signal output</td></tr><tr><td>VCC</td><td>ON</td><td>Control signal output</td></tr></table>	SEL	APC circuit	LDO	GND	OFF	Connection to VCC via 1kΩ	Hi-z	ON	Control signal output	VCC	ON	Control signal output
SEL	APC circuit	LDO													
GND	OFF	Connection to VCC via 1kΩ													
Hi-z	ON	Control signal output													
VCC	ON	Control signal output													
9	TEBC	Input	Tracking error balance adjustment signal input terminal • TEBC input voltage												
10	TEN	Input	Tracking error signal generation amp antiphase input terminal												
11	TEO	Output	Tracking error signal generation amp output terminal												
12	RFDC	Output	RF signal peak detection output terminal												
13	GVSW	Input	AGC, FE, TE amp gain switching terminal <table><tr><td>GVSW</td><td>Mode</td></tr><tr><td>GND</td><td>CD-RW</td></tr><tr><td>Hi-z</td><td>CD-DA</td></tr><tr><td>VCC</td><td>CD-CA</td></tr></table>	GVSW	Mode	GND	CD-RW	Hi-z	CD-DA	VCC	CD-CA				
GVSW	Mode														
GND	CD-RW														
Hi-z	CD-DA														
VCC	CD-CA														
14	VRO	Output	Reference voltage (VRO) output terminal • VCC=3.3V: VRO=1/2 VCC												
15	FEO	Output	Focus error signal generation amp output terminal												
16	FEN	Input	Focus error signal generation amp antiphase input terminal												
17	RFRP	Output	Signal generation amp output terminal for track count												
18	RFRPIN	Input	Signal generation amp input terminal for track count												
19	RFGO	Output	RF signal amplitude adjustment amp output terminal												
20	RFGC	Input	RF amplitude adjustment control signal input terminal • RFGC input voltage												
21	AGCIN	Input	RF signal amplitude adjustment amp input terminal												
22	RFO	Output	RF signal generation amp output terminal												
23	RFN	Input	RF signal generation amp input terminal												
24	GND	—	GND terminal												

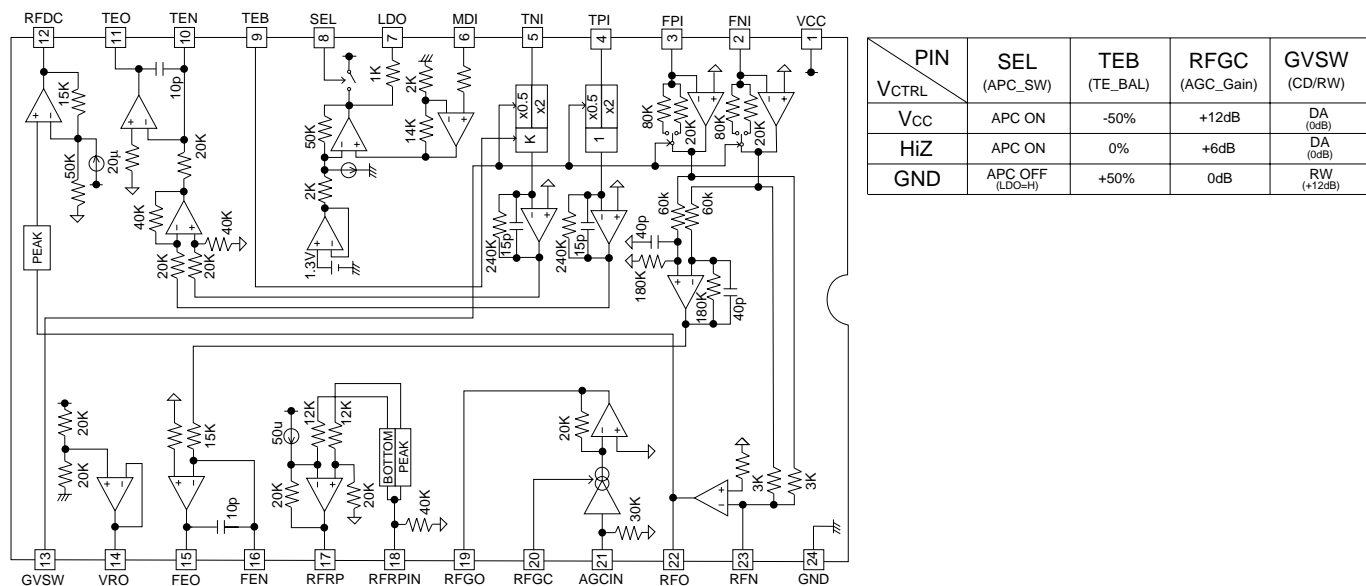


Figure 96 BLOCK DIAGRAM OF IC

IC901 RH-iX0354AWZZ: System Microcomputer (IX0354AW) (1/2)

Pin No.	Port Name	Input/Output	Function
1	P60/A16	Output	Cassette playback mute
2	P62/A18	Output	Recording output (Cassette)
3	P61/A17	Output	Recording bias output (Cassette)
4	P63/A19	Output	Span output for destination 1
5	P64/RD	Output	Cassette operation motor output
6	P65/WR	Output	Cassette solenoid output
7	P66/WAIT	Output	Span output for destination 2
8	P67/ASTB	Input	Pulse for tape running check
9	VDD	Input	To be connected to VDD
10	P100/T15/TO5	Input	A side foolproof switch
11	P101/T16/TO6	Input	B side foolproof switch
12	P102/T17/TO7	Input	Cassette CAM switch
13	P103/T18/TO8	Input	Cassette detection switch
14	P30/TO0	Output	Tuner chip enable
15	P31/TO1	Input	Destination input
16	P32/TO2	Output	CD mute
17	P33/T11	Input	Tuner span select
18	P34/T12	Output	Expanded IC control signal
19	P35/T100	Output	Expanded IC control signal
20	P36/T101	Output	Expanded IC control signal
21	P37	Output	Expanded IC control signal
22	TEST/Vpp	Input	Not used
23*	P90	Output	Not used
24*	P91	Output	Not used
25*	P92	Output	Not used
26*	P93	Output	Not used
27*	P94	Output	Not used
28	P06/INTP6	Output	POWER relay control
29*	P120/RTP0	Output	Not used
30*	P121/RTP1	Output	Not used
31*	P122/RTP2	Output	Not used
32	P123/RTP3	Output	LED output for timer
33	P124/RTP4	Output	LCD backlight control
34	P125/RTP5	Output	System mute output
35	P126/RTP6	Input	Panel close switch
36	P127/RTP7	Input	Panel open switch
37	VDD	Input	Connected to VDD
38	X2	Output	8 MHz sera - lock
39	X1	Input	8 MHz sera - lock
40	VSS	Input	Ground potential to be connected to VSS
41	XT2	Output	32.768 kHz crystal
42	XT1	Input	32.768 kHz crystal
43	RESET	Input	Reset input
44	P00/INTP0	Input	Remote control signal input
45	P01/INTP1	Input	JOG A input
46	P02/INTP2/NMI	Input	JOG B input
47	P03/INTP3	Input	Power failure detection
48	P04/INTP4	Input	Speaker abnormal detection
49	P05/INTP5	Output	Speaker relay
50	P95	Input	POWER key input
51	AVDD	—	Analog power supply

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

CD-MD3000H/CD-MD3000W**IC901 RH-iX0354AWZZ: System Microcomputer (IX0354AW) (2/2)**

Pin No.	Port Name	Input/Output	Function
52	AVref0	—	Analog reference potential 0
53	P10/ANI0	Input	Key input 0 (AD port)
54	P11/ANI1	Input	Key input 1 (AD port)
55	P12/ANI2	Input	Key input 2 (AD port)
56	P13/ANI3	Input	Key input 3 (AD port)
57	P14/ANI4	Input	Key input 4 (AD port)
58	P15/ANI5	Input	Not used
59	P16/ANI6	Input	Tuner state input
60	P17/ANI7	Input	Not used
61	AVSS	—	Analog GND
62	P130/ANO0	Input	MD serch output
63	P131/ANO1	Output	MD reset output
64	AVref1	Input	Analog reference potential 1
65	P70/RxD2/SI2	Input	MD data input
66	P71/TxD2/SO2	Output	K data output
67	P72/ASCK2/SCK2	Input	MD DSCK output
68	P20/RxD1/SI1	Input	Tuner data input
69	P21/TxD1/SO1	Output	Tuner data output
70	P22/ASCK1/SC	Output	Tuner clock output
71	P23/PCL	Input	MD load switch
72	P24/BUZ	Input	MD DSTB input
73	P25/SI0/SDA0	Output	LCD read/write
74	P26/SO0	Output	MD SID output
75	P27/SCK0/SCL0	Output	LCD clock
76	P80/A0	Input	CAM A switch e
77	P81/A1	Input	CAM A switch d
78	P82/A2	Input	CAM A switch c
79	P83/A3	Input	CAM A switch b
80	P84/A4	Input	CAM A switch a
81	P85/A5	Input	TRAY identification switch a
82	P86/A6	Input	TRAY identification switch b
83	P87/A7	Input	TRAY identification switch c
84	P40/AD0	Input	CAM C switch b
85	P41/AD1	Input	CAM C switch a
86	P42/AD2	Output	CD LSI chip enable
87	P43/AD3	Output	CD LSI clock
88	P44/AD4	Input/Output	CD LSI data input/output
89	P45/AD5	Input/Output	CD LSI data input/output
90	P46/AD6	Input/Output	CD LSI data input/output
91	P47/AD7	Input/Output	CD LSI data input/output
92	P50/A8	Output	CD LSI reset
93	P51/A9	Output	CD LSI RW switching
94	P52/A10	Input	CD pickup inner switch input
95	P53/A11	Output	Tray motor forward rotation
96	P54/A12	Output	Tray motor reverse rotation
97	P55/A13	Output	CAM motor forward rotation
98	P56/A14	Output	CAM motor reverse rotation
99	P57/A15	Output	TAPE REC mute
100	VSS	Input	Ground potential connected to VSS

IC702 VHiBU2092F/-1: Output Expander (BU2092F)

Pin No.	Port Name	Input/Output	Function
1	VSS	Input	GND
2	DATA	Input	Serial data input
3	CLOCK	Input	Serial clock input
4	LCK	Input	Latch clock input
5	Q0	Output	Panel LED
6	Q1	Output	Stop LED
7	Q2	Output	< LED
8	Q3	Output	>> LED
9	Q4	Output	<< LED
10	Q5	Output	> LED
11	Q6	Output	CD 6 LED
12	Q7	Output	CD 5 LED
13	Q8	Output	CD 4 LED
14	Q9	Output	CD 3 LED
15	Q10	Output	CD 2 LED
16	Q11	Output	CD 1 LED
17	OE	Output	Output enable
18	VDD	Input	Power supply

IC912 VHiBU2092F/-1: Output Expander (BU2092F)

Pin No.	Port Name	Input/Output	Function
1	VSS	Input	GND
2	DATA	Input	Serial data input
3	CLK	Input	Serial clock input
4	LCK	Input	Latch clock input
5	Q0	Output	For CD power control
6*	Q1	Output	Not used
7*	Q2	Output	Not used
8*	Q3	Output	Not used
9	Q4	Output	Not used
10*	Q5	Output	Not used
11*	Q6	Output	Panel control switch
12	Q7	Output	Panel control output close
13	Q8	Output	Panel control output open
14	Q9	Output	Fan motor ON/OFF
15	Q10	Output	Not used
16	Q11	Output	Not used
17	OE	Output	Output enable
18	VDD	Input	Power supply

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

CD-MD3000H/CD-MD3000W

ICT21 VHiLC72722/-1: RDS Decoder (LC72722) (For CD-MD3000H Only)

Pin No.	Port Name	Input/Output	Function
1	VREF	Output	Reference voltage output (Vdda/2)
2	MPXIN	Input	Baseband (multiplexed) signal input
3	VDDA	—	Analog power supply (+5V)
4	VSSA	—	Analog ground
5	FLOUT	Output	Subcarrier output (filter output)
6	CIN	Input	Subcarrier input (comparator input)
7	T1	Input	Test input (This pin must always be connected to ground.)
8	T2	Input	Test input (standby control) 0: Normal operation 1: standby state (crystal oscillator stopped)
9*	T3 (RDCL)	Input/Output (*)	Test I/O (RDS clock output)
10*	T4 (RDDA)	Input/Output (*)	Test I/O (RDS data output)
11*	T5 (RSFT)	Input/Output (*)	Test I/O (soft-decision control data output)
12	XOUT	Output	Crystal oscillator output (4.332/8.664 MHz)
13	XIN	Input	Crystal oscillator input (external reference signal input)
14	VDDD	—	Digital power supply (+5V)
15	VSSD	—	Digital ground
16*	T6 (ERROR/57K/TP/BE1)	Input/Output (*)	Test I/O (error status, regenerated carrier, TP, error block count outputs)
17*	T7 (CORREC/ARI-ID/TA/BE0)	Input/Output (*)	Test I/O (error correction status, SK detection, TA, error block count outputs)
18*	SYNC	Input/Output (*)	Block synchronization detection output
19*	RDS-ID	Output	RDS detection output
20	DO	Output	Data output
21	CL	Input	Clock input Data input Chip enable } Serial data interface (CCB)
22	DI	Input	
23	CE	Input	
24	SYR	Input	Synchronization and RAM address reset (active high)

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.
(*): Normally the output pin. Used as an I/O pin in test mode, which is not available to user applications.

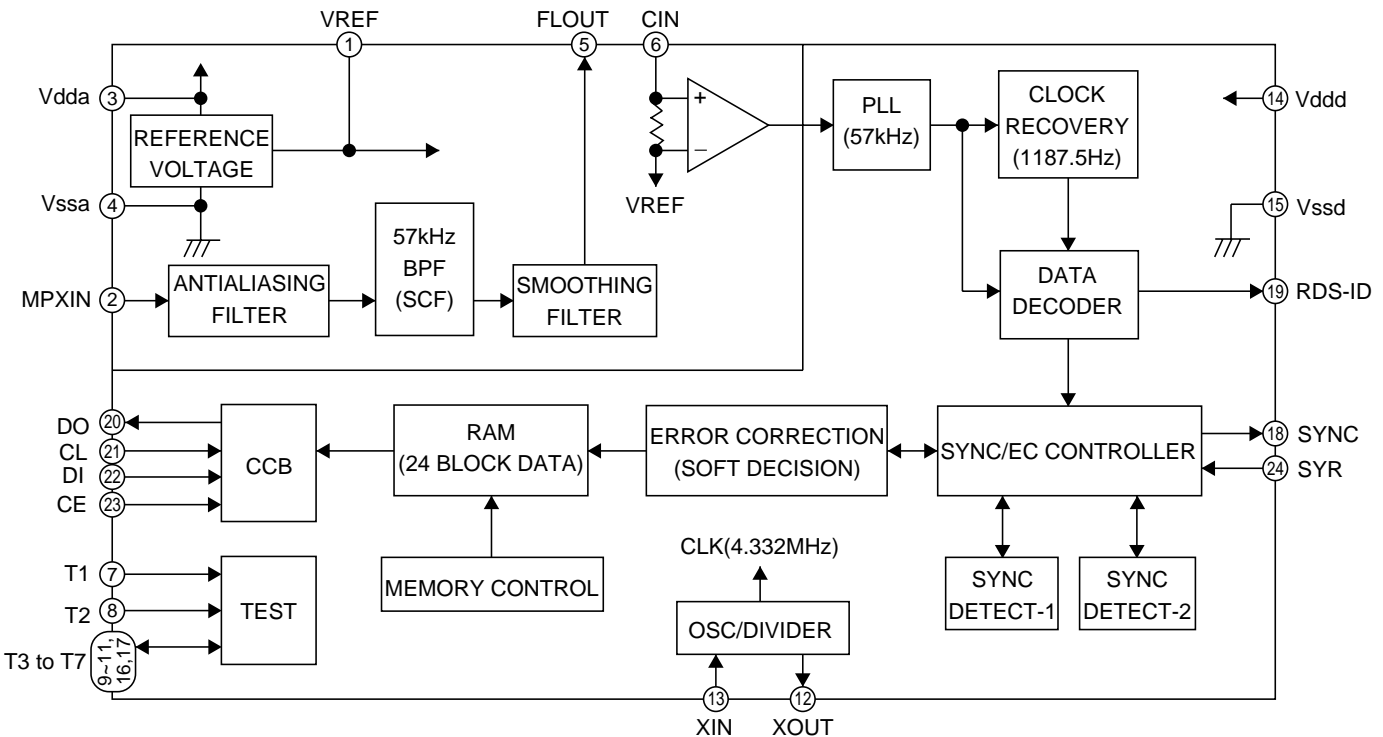


Figure 100 BLOCK DIAGRAM OF IC

IC1101 VHiiR3R58M/-1:RF Signal Processor (IR3R58M)

Pin No.	Terminal Name	Function
1	RF1	RF signal input terminal 1. Input of RF signal output of pickup
2	RF2	RF signal input terminal 2. Input of RF signal output of pickup
3	RF3	RF signal input terminal 3. Input of RF signal output of pickup
4	RF4	RF signal input terminal 4. Input of RF signal output of pickup
5	REFI	Reference voltage amplifier input terminal
6	REFO	Reference voltage amplifier output terminal
7	AOUT	Output terminal 1 of signal amplifier for servo (focus servo system)
8	ASW	Output terminal 2 of signal amplifier for servo (focus servo system)
9	AIN	Reverse input terminal of signal amplifier for servo (focus servo system)
10	BIN	Reverse input terminal of signal amplifier for servo (focus servo system)
11	BSW	Output terminal 2 of signal amplifier for servo (focus servo system)
12	BOUT	Output terminal 1 of signal amplifier for servo (focus servo system)
13	EOUT	Output terminal 1 of signal amplifier for servo (tracking servo system)
14	ESW	Output terminal 2 of signal amplifier for servo (tracking servo system)
15	EIN	Reverse input terminal of signal amplifier for servo (tracking servo system)
16	FIN	Reverse input terminal of signal amplifier for servo (tracking servo system)
17	FSW	Output terminal 2 of signal amplifier for servo (tracking servo system)
18	FOUT	Output terminal 1 of signal amplifier for servo (tracking servo system)
19	EOU	Output terminal 1 of signal amplifier for servo (tracking servo system)
20	BOU	Output terminal 1 of signal amplifier for servo (focus servo system)
21	AOU	Output terminal 1 of signal amplifier for servo (focus servo system)
22	TCGO	Group mode: Track cross detection signal amplifier output terminal
23	TCGI	Group mode: Track cross detection signal amplifier input terminal
24	RFADD	Resistance addition output terminal of RF1 - RF4
25	DTEMP	Chip temperature detection terminal
26	SGAIN	Switch section control terminal of amplifier for servo
27	DISC	Pit mode, groove mode selecting control terminal
28*	OPICPW	Power output terminal for OPIC
29	VCC2	Power supply terminal of digital section and power section
30*	WBO	Comparator output terminal for binary coded ADIP signal
31	GND2	GND terminal of digital section and power section
32	ADIPO	ADIP signal preamplifier output terminal
33*	ADIPNF	ADIP signal AGC amplifier output terminal
34	ADAGC	Smoothing capacitor connection terminal for ADIP signal AGC
35	ADAGI	ADIP signal AGC amplifier input terminal
36	2-1	Differential signal of RF1, RF2
37	EFMO	RF signal AGC amplifier output terminal
38	DCNF	Smoothing capacitor connection terminal for RF signal AGC amplifier reference voltage
39	EFMAGC	Smoothing capacitor connection terminal for RF signal AGC
40	VCC1	Analog section power supply terminal
41	BIAS	Bias input terminal
42	GND1	Analog section GND terminal
43	NIN	RF signal AGC amplifier reverse input terminal
44	PITG	Pit mode: Ground terminal
45	3 + 4	Groove mode: Resistance addition output terminal of RF3 and RF4
46	PIN	RF signal AGC amplifier non-reverse input terminal
47	1 + 2	Groove mode: Resistance addition output terminal of RF1 and RF2
48	1234	Pit mode: Resistance addition output terminal of RF1 - RF4

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

CD-MD3000H/CD-MD3000W

IC1101 VHiiR3R58M/-1:RF Signal Processor (IR3R58M)

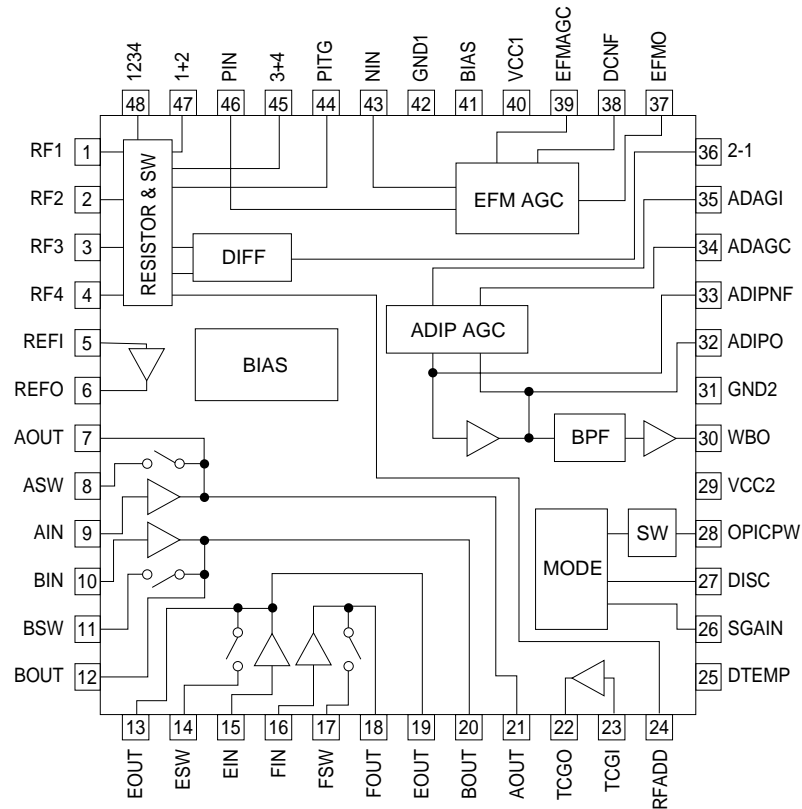


Figure 102-1 BLOCK DIAGRAM OF IC

IC1201 VHILR37814/-1: Endec/Atrac (LR37814)

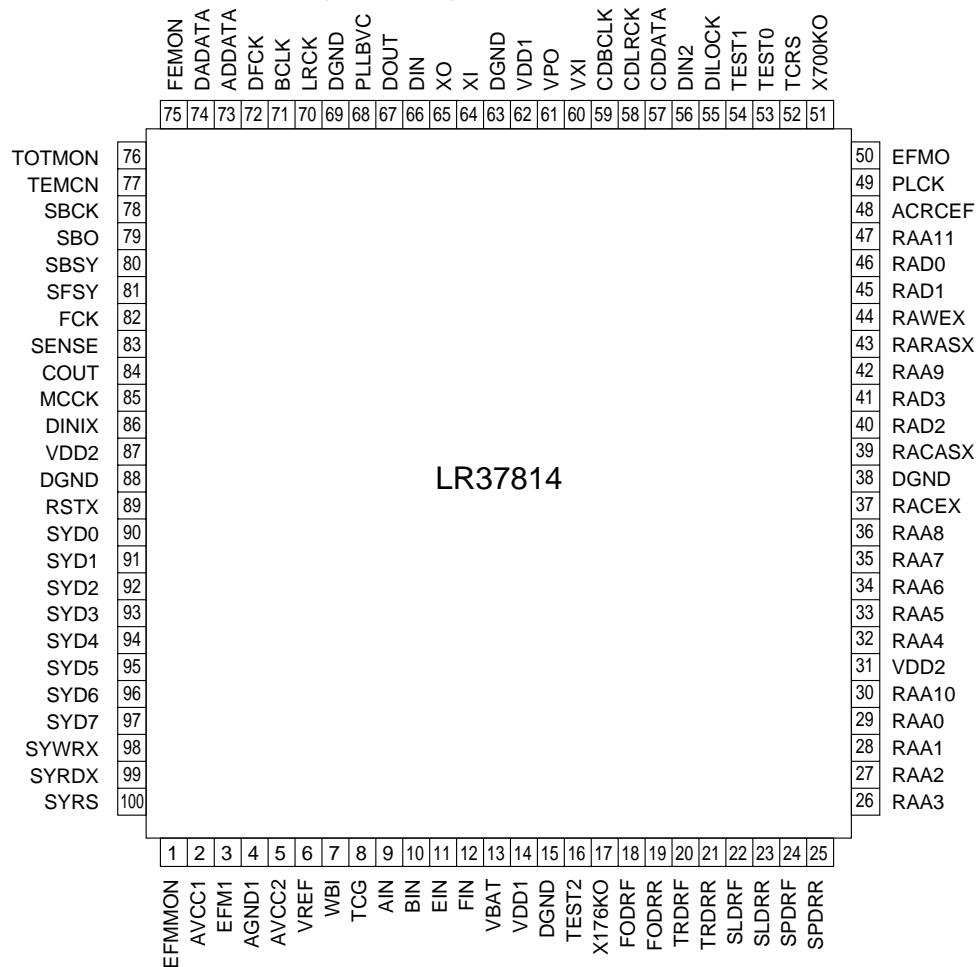


Figure 102-2 BLOCK DIAGRAM OF IC

IC1201 VHiLR37814/-1: Endec/Atrac (LR37814) (1/2)

Pin No.	Terminal Name	Input/Output	Function
1*	EFMMON	Output	EFM monitor output
2	AVCC1	–	Analog power supply (for EFM system 8AD, 8DA)
3	EFMI	Input	EFM signal input from RF amplifier
4	AGND1	–	Analog GND
5	AVCC2	–	Analog power supply (for servo system, ADIP system 1bit AD)
6	VREF	Input	Reference voltage input for RF amplifier
7	WBI	Input	ADIP wobble signal
8	TCG	Input	Track cross signal
9	AIN	Input	Focus error signal A
10	BIN	Input	Focus error signal B
11	EIN	Input	Tracking error signal E
12	FIN	Input	Tracking error signal F
13	VBAT	Input	Power voltage detection signal for constant voltage servo
14	VDD1	–	Internal digital power supply
15	DGND	–	Digital GND
16	TEST2	Input	Input for test. Connected to GND if used normally
17*	X176KO	Output	Clock output. f=176.4KHz (4fs)
18	FODRF	Output	Focus servo forward output. PWM.
19	FODRR	Output	Focus servo reverse output. PWM.
20	TRDRF	Output	Tracking servo forward output. PWM.
21	TRDRR	Output	Tracking servo reverse output. PWM.
22	SLDRF	Output	Slide servo forward output. PWM.
23	SLDRR	Output	Slide servo reverse output. PWM.
24	SPDRF	Output	Spindle servo forward output. PWM.
25	SPDRR	Output	Spindle servo reverse output.
26	RAA3	Output	Address output to external D-RAM. ADR3
27	RAA2	Output	Address output to external D-RAM. ADR2
28	RAA1	Output	Address output to external D-RAM. ADR1
29	RAA0	Output	Address output to external D-RAM. ADR0 (LSB)
30*	RAA10	Output	Address output to external D-RAM. ADR10 (MSB)
31	VDD2	–	Power supply for interface
32	RAA4	Output	Address output to external D-RAM. ADR4
33	RAA5	Output	Address output to external D-RAM. ADR5
34	RAA6	Output	Address output to external D-RAM. ADR6
35	RAA7	Output	Address output to external D-RAM. ADR7
36	RAA8	Output	Address output to external D-RAM. ADR8
37	RAOEX	Output	Data output enable signal output to external D-RAM
38	DGND	–	Digital GND
39	RACASX	Output	Column address strobe signal output to external D-RAM
40	RAD2	Input/Output	Data input and output with external D-RAM. D2
41	RAD3	Input/Output	Data input and output with external D-RAM. D3 (MSB)
42	RAA9	Output	Address output to external D-RAM. ADR9
43	RARASX	Output	Low address strobe signal output to external D-RAM
44	RAWEX	Output	Data write enable signal output to external D-RAM
45	RAD1	Input/Output	Data input and output with external D-RAM. D1
46	RAD0	Input/Output	Data input and output with external D-RAM. D0 (LSB)
47*	RAA11	Output	Address output to external D-RAM. ADR11 (MSB 64 Mbit)
48*	ACRCER	Output	CRC error flag monitor output of ADIP
49*	PLCK	Output	Playback mode: EFM PLL clock output
50	EFM0	Output	Recording mode: EFM signal output. Playback mode: C1F (C1 error flag) monitor output.
51*	X700KO	Output	Clock output. f=705.6KHz

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

CD-MD3000H/CD-MD3000W

IC1201 VHiLR37814/-1: Endec/Atrac (LR37814) (2/2)

Pin No.	Terminal Name	Input/Output	Function
52*	TCRS	Output	Track cross signal
53	TEST0	Input	Input for test. Connected to GND if used normally.
54	TEST1	Input	Input for test. Connected to GND if used normally.
55	DILOCK	Output	DIN lock detection
56	DIN2	Input/Output	Digital input signal. Expansion port 0.
57	CDDATA	Input/Output	Data input for dubbing. Expansion output port 1.
58	CDLRCK	Input/Output	LR clock input for dubbing. Expansion output port 2.
59	CDBCLK	Input/Output	Bit clock input for dubbing. Expansion output port 3.
60	VXI	Input	PLL clock input for variable pitch
61*	VPO	Output	PLL phase error output for variable pitch
62	VDD1	–	Internal digital power supply
63	DGND	–	Digital GND
64	XI	Input	Transmit circuit input. 33.8688MHz
65	XO	Output	Transmit circuit input. 33.8688MHz
66	DIN	Input	Digital input signal
67	DOUT	Output	Digital output signal
68	PLLBVG	Output	For Internal PLL. Terminal for external capacitor
69	DGND	–	Digital GND
70	LRCK	Output	L-ch, R-ch selection output of music data
71	BCLK	Output	Shift lock of music data
72	DFCK	Output	Clock for AD/DA converter digital filter. 256Fs.
73	ADDATA	Input	Sound data input.
74	DADATA	Output	Sound data output.
75*	FEMON	Output	Focus error signal monitor output. Series resistance 10 - 100KΩ built-in
76*	TOTMON	Output	Total signal monitor output. Series resistance 10 - 100KΩ built-in
77*	TEMON	Output	Tracking error signal monitor output. Series resistance 10 - 100KΩ built-in
78	SBCK	Input/Output	DIN subcode read clock. Expansion port 4.
79	SBO	Output	DIN subcode serial data. Expansion port 5.
80	SBSY	Output	DIN subcode block synchronous signal. Expansion port 6.
81	SFSY	Output	DIN subcode frame synchronous signal. Expansion port 7.
82	FOK	Output	Focus OK detection signal. "0": focus OK
83	SENSE	Output	Servo condition detection signal
84	COUT	Output	Track cross signal output
85	MCK	Output	Clock output for microcomputer
86	DINTX	Output	Interrupt request output terminal to system computer interface
87	VDD2	–	Power supply for interface
88	DGND	–	Digital GND
89	RSTX	Input	Chip reset input. Reset by L. (Note)
90	SYD0	Input/Output	Data bus terminal of system computer interface (LSB)
91~96	SYD1~SYD6	Input/Output	Data bus terminal of system computer interface
97	SYD7	Input/Output	Data bus terminal of system computer interface (MSB)
98	SYWRX	Input	Resister write pulse input of system computer interface
99	SYRDX	Input	Resister read pulse input of system computer interface
100	SYRS	Input	Resister selection input of system computer interface

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

Note: Set RSTX to L when turning on the power or after turning on the power.

IC1202 RH-iX2474AFZZ: 4Mbit D-RAM (IX2474AF)

Pin No.	Terminal Name	Function
1, 2	I/O1, I/O2	Data input/Data output
3	\overline{WE}	Write enable
4	RAS	Row address strobe
5	A9	Address input
6-9	A0-A3	Address input
10	Vcc	Power (3.3V)
11-15	A4-A8	Address input
16	\overline{OE}	Output enable
17	\overline{CAS}	Column address strobe
18, 19	I/O3, I/O4	Data input/Data output
20	GND	Ground

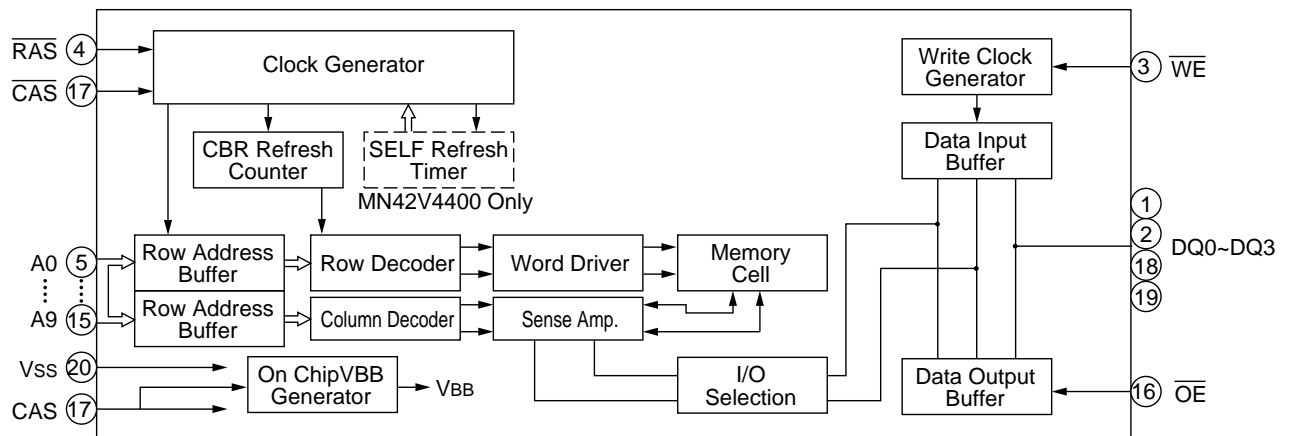


Figure 105-1 BLOCK DIAGRAM OF IC

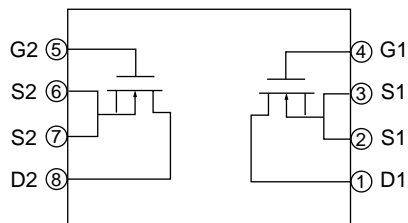
IC1301 VHiFTD2005/-1: Head Driver (FTD2005)

Figure 105-2 BLOCK DIAGRAM OF IC

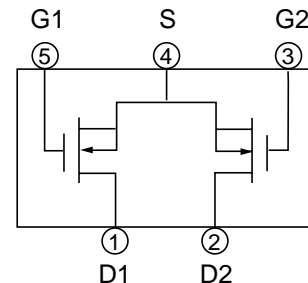
IC1302 VHiCPH5608/-1: Head Driver (CPH5608)

Figure 105-3 BLOCK DIAGRAM OF IC

IC1402 VHi58X2402T-1: EEPROM (58X2402T)

Pin No.	Terminal Name	Function
1-3	A0~A2	Device address
4	VSS	Ground
5	SDA	Serial data input/output
6	SCL	Serial clock input
7	WP	Write protect
8	VCC	Power supply

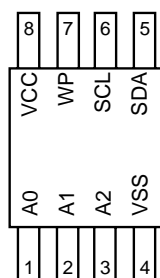


Figure 105-4 BLOCK DIAGRAM OF IC

CD-MD3000H/CD-MD3000W

IC1401 RH-iX0349AWZZ: MD System Microcomputer (IX0349AW) (1/2)

Pin No.	Terminal Name	Input/Output	Function
1	4M/16M	Input	4M/16M DRAM selection input
2	64M	Input	64M DRAM selection input
3	LDVAR	Output	LDVAR (laser power adjustment output)
4*	ADJS	Output	ADJS (for automatic adjustment step check)
5	CIN	Input	CIN (track count signal input)
6*	NC	– (Output)	Not used
7	UNLOCK	Input	ERR input (UNLOCK of MD LSI monitor PLL)
8	BYTE	Input	GND
9	CNVss	Input	GND
10*	STID OUT	Output	ST-ID output
11*	SEACH OUT	Output	MD search output
12	RESET	Input	RESET input
13*	NC	–	Clock output
14	Vss	–	GND
15	MCKK	Input	EXTAL (8.4672MHz)
16	Vcc	–	+3.15V
17	P85	Input	Input output port P85
18	DINT	Input	DINT (Interrupt input from MD-LSI)
19	SFSY	Input	Subcode communication frame synchro Interrupt input
20	ST-ID	Input	ST-ID input (MD-ON)
21	SERCH	Input	CD search input (Synchronous REC interrupt input)
22	MDRMUT	Output	MD RMUT output (MOTOR DRIVER MUTE)
23*	NC	Output	Not used
24	DSENSE	Input	DSENSE (servo sense input from MD-LSI)
25	P-DOWN	Input	P-DOWN (blackout detection)
26	HD ON	Output	HDON (magnetic head power ON/OFF output)
27	EEPRO	Output	EEPROM protect release output
28	HFON	Output	HFON
29	EEPK	Output	EEPROM serial clock output
30	EEPD	Input/Output	EEPROM data input output
31	MD DATA	Output	MD computer data input output
32	K DATA	Input	System computer data input
33	DSCK	Input	System computer clock input
34	DSTB	Output	DSTB (system computer communication possible and during communication)
35*	NC	Output	Not used
36	SBO	Input	Subcode serial data input
37	SBCK	Output	Subcode communication serial clock output
38	DISC	Output	DISC
39	R/P	Output	R/P output (REC/PLAY selection)
40	FOK	Input	FOK (focus servo condition monitor input)
41	FLASH L	Input	Flash write selection
42	SGAIN	Output	SGAIN
43	SYRS	Output	MD LSI resister select signal output
44	SYRD	Output	SYRD (MD-LSI read signal output)
45	SYWR	Output	SYWR (MD-LSI write signal output)
46	FLASH H	Input	Flash write selection
47	SYS D7	Input/Output	SYS D7 (data bus 7)
48	SYS D6	Input/Output	SYS D6 (data bus 6)
49	SYS D5	Input/Output	SYS D5 (data bus 5)
50	SYS D4	Input/Output	SYS D4 (data bus 4)
51	SYS D3	Input/Output	SYS D3 (data bus 3)

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC1401 RH-iX0349AWZZ: MD System Microcomputer (IX0349AW) (2/2)

Pin No.	Terminal Name	Input/Output	Function
52	SYS D2	Input/Output	SYS D2 (data bus 2)
53	SYS D1	Input/Output	SYS D1 (data bus 1)
54	SYS D0	Input/Output	SYS D0 (data bus 0)
55*	P37	Output	Input output port P37
56*	P36	Output	Input/output port P36
57*	P35	Output	Input/output port P35
58*	P34	Output	Input/output port P34
59*	P33	Output	Input/output port P33
60*	P32	Output	Input/output port P32
61	P31	Input	Input/output port P31
62	Vcc	Input	+3.15V
63	INNSW	Input	Pick most inner periphery detection input
64	GND	—	GND
65	L3 DATA	Output	L3 DATA (soft serial communication, 2 mode presence, LSB first)
66	L3 MODE	Output	L3 MODE (soft serial communication, 2 mode presence, LSB first)
67	L3 CLK	Output	L3 CLK (soft serial communication, 2 mode presence, LSB first)
68*	P24	Output	Input output port P24
69*	P23	Output	Input output port P23
70	PCNT0	Output	PCNT0 output
71*	LAST	Output	LAST
72	LD ON	Output	LDON output (H : ON)
73	A/B	Input	ANLPTR output. ADC/DAC selection input.
74	SBSY	Input	Subcode communication block synchro input.
75*	DAP ON	Output	DAPON output (for CK)
76*	DFS0	Output	DFS0 output
77*	DFS1	Output	DFS1 output
78	P12	Input	Input output port P12
79	P11	Input	Input/output port P11
80	XRST	Output	XRST (system reset output)
81*	AD MUTE	Output	ADMUTE output (for CK)
82	LD+	Output	Loading motor + side control output
83	LD-	Output	Loading motor - side control output
84*	MUTE	Output	MUTE output
85*	RAST	Output	RAST
86*	TEST2	Input	TEST 2
87*	TEST1	Input	TEST 1
88*	TEST0	Input	TEST 0
89	AVCK3	Input	AVCK3 (motor driver power monitor input)
90	AVCK2	Input	AVCK2 (AD/DA section 3.1 V monitor input)
91	AVCK1	Input	AVCK1 (head circuit power monitor input)
92	DTEMP	Input	DTEMP (temperature detection input)
93	MINF	Input	MINF (disc type/REC input/mecha position)
94*	TEST K1	Input	TEST K1
95*	TEST K2	Input	TEST K2
96	GND	—	GND
97*	NC	—	Not used
98	VREF	—	+3.15V
99	AVcc	—	+3.15V
100	PR	Input	Playback/recording unit setting input

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

CD-MD3000H/CD-MD3000W

IC1701 VHiUDA1345/-1: AD/DA Converter (UDA1345)

Pin No.	Terminal Name	Function
1	VSSA(ADC)	AD converter analog ground
2	VDDA(ADC)	AD converter analog power
3	VINL	AD converter input (left)
4	Vref(A)	AD converter reference voltage
5	VINR	AD converter input (right)
6	VADCN	AD converter reference voltage N
7	VADCP	AD converter reference voltage P
8*	MC1	Mode control 1 (Pulled-down)
9*	MP1	Multi-purpose pin 1
10	VDDD	Digital power
11	VSSD	Digital ground
12	SYSCLK	System clock 256fs, 384fs, 512fs
13	MP2	Multi-purpose pin 2
14	MP3	Multi-purpose pin 3
15	MP4	Multi-purpose pin 4
16	BCK	Bit clock input
17	WS	Word select input
18	DATAO	Data output
19	DATAI	Data input
20*	MP5	Multi-purpose pin 5 (Pulled-down)
21*	MC2	Mode control 2 (Pulled-down)
22	AVSS(DAC)	DA converter analog ground
23	AVDD(DAC)	DA converter analog power
24	VOUTR	DA converter output (right)
25	VDDO	Opeamp power
26	VOUTL	DA converter output (left)
27	VSSO	Opeamp ground
28	Vref(D)Input	AD converter reference voltage

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

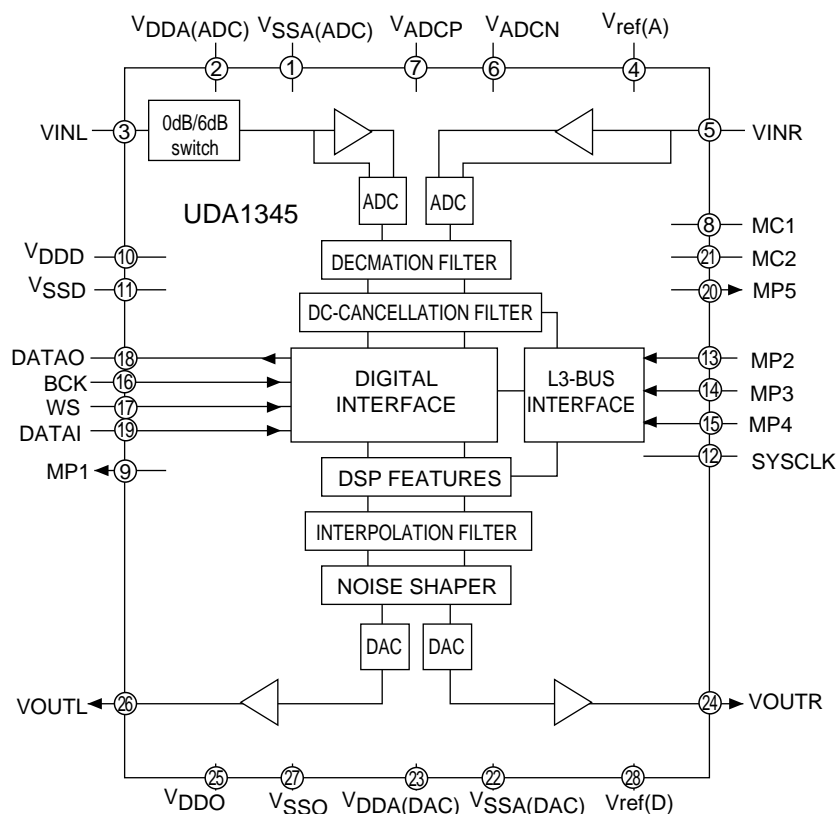


Figure 108 BLOCK DIAGRAM OF IC

WIRING OF PRIMARILY SUPPLY LEADS (CD-MD3000H FOR U.K. ONLY)

If any one of the bands shown in Figure 109 is removed some reason, be sure replace it to the original position and same appearance as before.

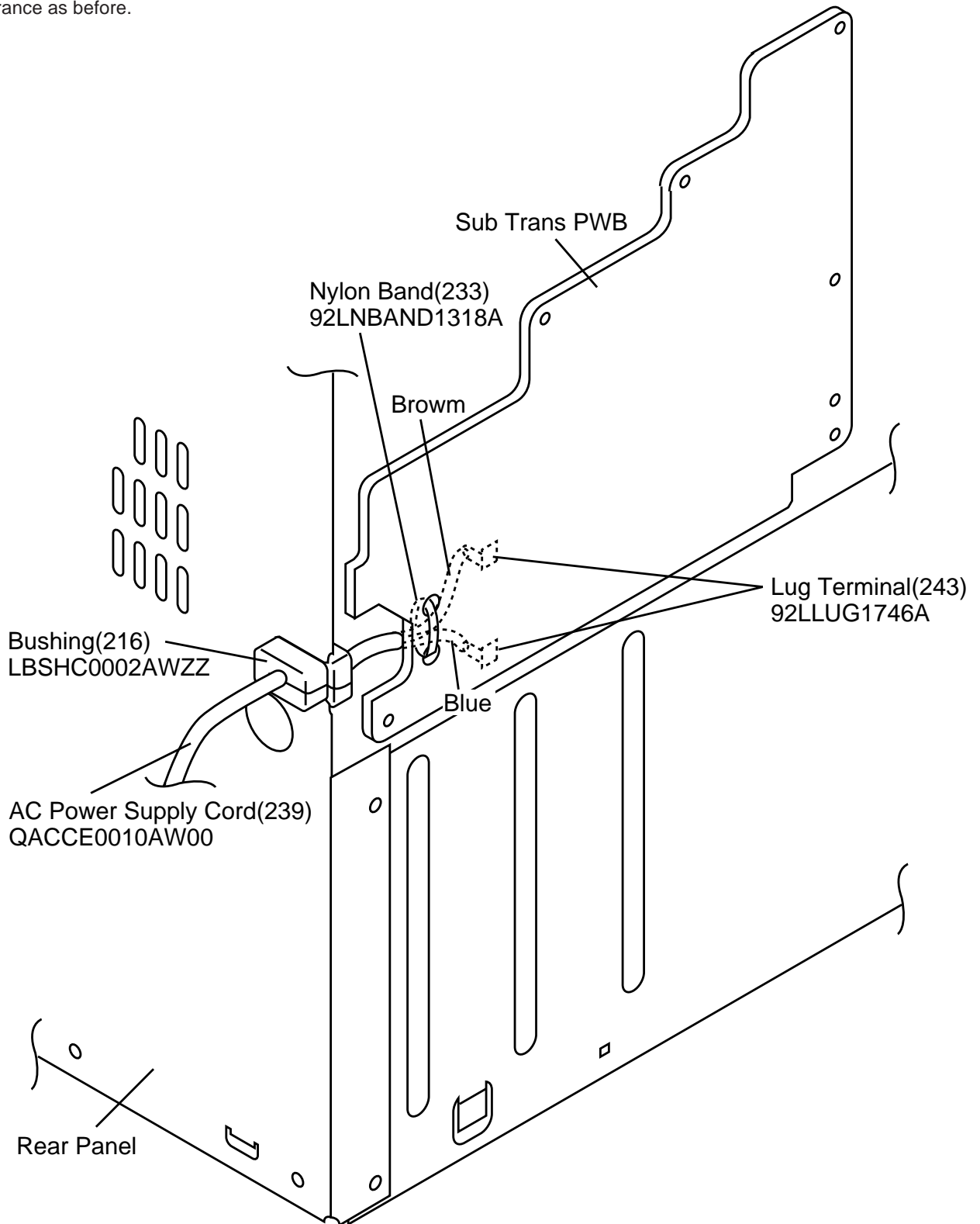
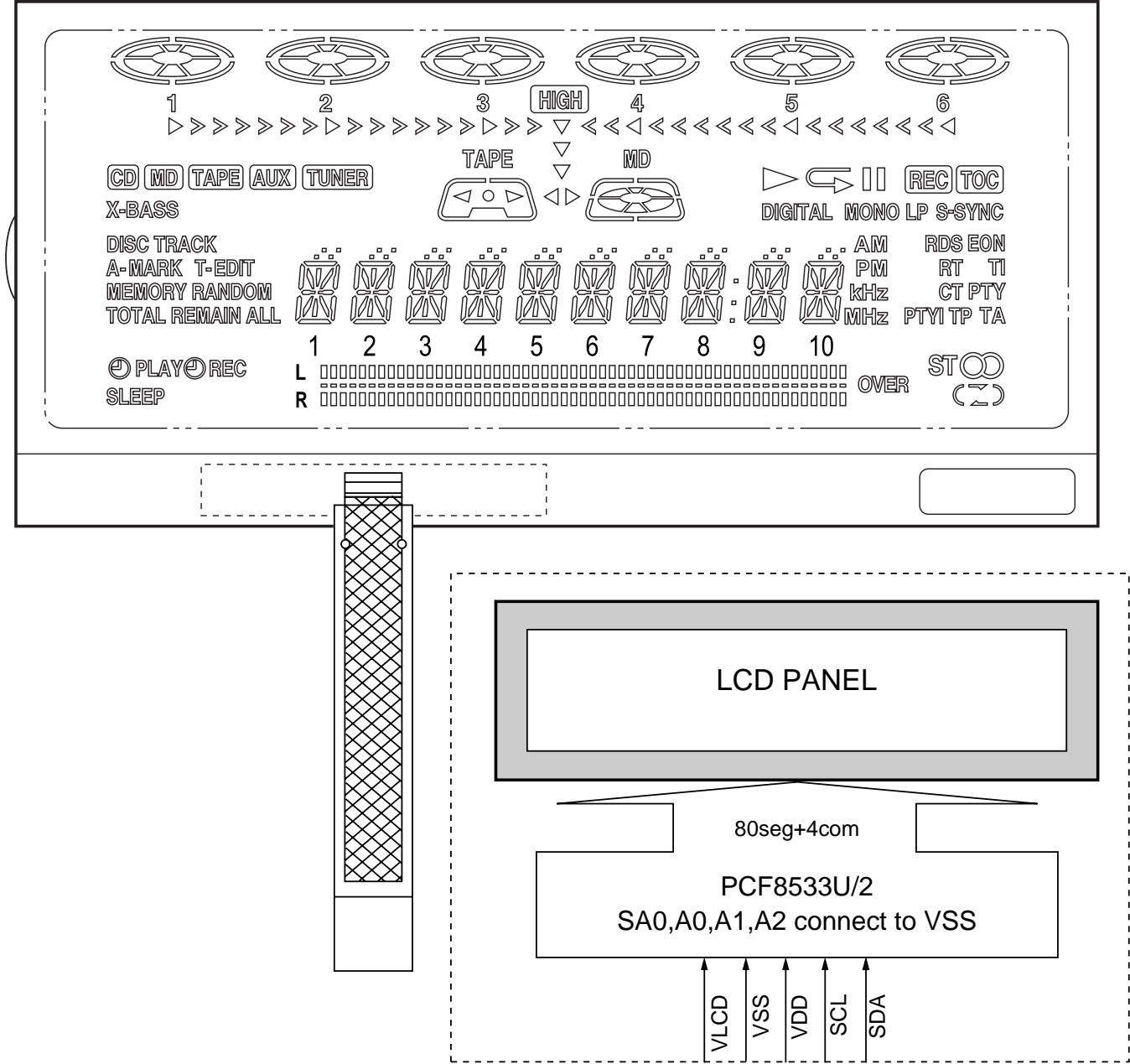


Figure 109

LCD DISPLAY



Pin No.	Pin Name	I/O	Connect to	Description
1	VLCD	—	Power supply	LCD supply voltage
2	VSS	—	Power supply	Logic ground
3	VDD	—	Power supply	Supply voltage (5V)
4	SCL	I	MPU	I ² C-bus serial clock input
5	SDA	I/O	MPU	I ² C-bus serial data input/output

SHARP PARTS GUIDE

AUDIO TOWER SYSTEM

MODEL CD-MD3000H

CD-MD3000H Audio Tower System consisting of CD-MD3000H (main unit) and CP-RW5000H (speaker system).

AUDIO TOWER SYSTEM

MODEL CD-MD3000W

CD-MD3000W Audio Tower System consisting of CD-MD3000W (main unit) and CP-RW5000W (speaker system).

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To have your order filled promptly and correctly, please furnish the following information.

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| 1. MODEL NUMBER | 2. REF. No. |
| 3. PART NO. | 4. DESCRIPTION |

★ MARK: SPARE PARTS-DELIVERY SECTION

For U.S.A. only

Contact your nearest SHARP Parts Distributor to order.

For location of SHARP Parts Distributor,
Please call Toll-Free;
1-800-BE-SHARP

Explanation of capacitors/resistors parts codes

Capacitors

VCC Ceramic type
 VCK Ceramic type
 VCT Semiconductor type
 VC •• MF Cylindrical type (without lead wire)
 VC •• MN Cylindrical type (without lead wire)
 VC •• TV Square type (without lead wire)
 VC •• TQ Square type (without lead wire)
 VC •• CY Square type (without lead wire)
 VC •• CZ Square type (without lead wire)
 VC J .. The 13th character represents capacity difference.
 ("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%,
 "C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±20%.

Resistors

VRD Carbon-film type
 VRS Carbon-film type
 VRN Metal-film type
 VR •• MF Cylindrical type (without lead wire)
 VR •• MN Cylindrical type (without lead wire)
 VR •• TV Square type (without lead wire)
 VR •• TQ Square type (without lead wire)
 VR •• CY Square type (without lead wire)
 VR •• CZ Square type (without lead wire)
 VR J .. The 13th character represents error.
 ("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.

NOTE:

Parts marked with “⚠” are important for maintaining the safety of the set.
 Be sure to replace parts with specified ones for maintaining the safety and performance of the set.

CD-MD3000H/CD-MD3000W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
CD-MD3000H/CD-MD3000W				
INTEGRATED CIRCUITS				
IC2	VHITC9490F/-1	J	AX	Servo/Signal Control,TC9490F
IC5	VHIBA5939S/-1	J	AH	Focus/Tracking/Spin/ Sled Driver,BA5939S
IC6	VHITA2147F/-1	J	AM	Servo Pre Amp.,TA2147F
IC7	VHI74VHC08F-1	J	AE	Invertor,74VHC08F
IC101	VHIAN7345K/-1	J	AM	Playback and Record/ Playback Amp.,AN7345K
IC102	VHIBA3126N/-1	J	AF	Head Selector,BA3126N
IC201	VHISTK40271-1	J	AZ	Power AMP.,STK40271
IC202	VHISTK40204-1	J	AX	Power AMP.,STK40204
IC203	VHIKIA4558P-1	J	AC	Ope Amp.,KIA4558P
IC301	VHITA7358AP-1	J	AG	FM Front End,TA7358AP [CD-MD3000W Only]
IC302	VHILC72131/-1	J	AP	PLL (Tuner),LC72131
IC303	VHILA1832S/-1	J	AN	FM IF Det./FM Mpx./AM IF, LA1832S
IC501	VHIBU4066BCF1	J	AD	Input Selector,BU4066BCF
IC502	VHILC75341/-1	J	AM	Audio Processor,LC75341
IC503	VHINJM4558M-1	J	AC	Ope Amp.,NJM4558M
IC701	VHITA7291S/-1	J	AH	Loading Motor Driver,TA7291S
IC702	VHIBU2092F/-1	J	AM	Output Expander,BU2092F
IC802	VHIKIA7810AP1	J	AF	Voltage Regulator,KIA7810AP
IC803	VHINJM431L/-1	J	AE	Voltage Regulator,NJM431L
IC808	VHIKIA7805AP1	J	AF	Constant Voltage Regulator, KIA7805AP
IC901	RH-IX0354AWZZ	J	AY	System Microcomputer, IX0354AW
IC905	VHIKIA7042AP1	J	AC	Reset,KIA7042AP
IC912	VHIBU2092F/-1	J	AM	Output Expander,BU2092F
IC913	VHIKIA7805AP1	J	AF	Voltage Regulator,KIA7805AP
IC921	VHI74VHC00F-1	J	AE	Digital Signal Switch,74VHC00F
IC1101	VHIIR3R58M/-1	J	AM	RF Signal Processor,IR3R58M
IC1201	VHILR37814/-1	J	BH	Endec/Atrac,LR37814
IC1202	RH-IX2474AFZZ	J	BF	4Mbit D-RAM,IX2474AF
IC1300	VHI74ACT02T-1	J	AE	Head Driver,74ACT02T
IC1301	VHIFTD2005/-1	J	AG	Head Driver,FTD2005
IC1302	VHICPH5608/-1	J	AH	Head Driver,CPH5608
IC1401	RH-IX0349AWZZ	J	AY	MD System Microcomputer, IX0349AW
IC1402	VHI58X2402T-1	J	AF	EEPROM,58X2402T
IC1601	VHIM56788FP-1	J	AX	Motor Driver,M56788FP
IC1701	VHIUDA1345/-1	J	AU	AD/DA Converter,UDA1345
IC1702	VHINJM431U/-1	J	AE	Regulator,NJM431U
IC1801	VHIXC62EP32-1	J	AE	Regulator,XC62EP32
IC1802	VHIXC62FP26P1	J	AG	Regulator,XC62FP26P
ICT21	VHILC72722/-1	J	AY	RDS Decoder,LC72722 [CD-MD3000H Only]
TRANSISTORS				
Q1	VS2SC1740R/-1	J	AB	Silicon,NPN,2SC1740 R
Q3	VS2SD2012//-1	J	AD	Silicon,NPN,2SD2012
Q4	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q5	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M
Q101	VSKRA107M//-1	J	AE	Digital,PNP,KRA107 M
Q102	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q114	VS2SA1015GR-1	J	AB	Silicon,PNP,2SA1015 GR
Q115	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q116	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
Q119,120	VSDTC363TS/-1	J	AC	Digital,NPN,DTC363 TS
Q200	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M [CD-MD3000H]
Q200	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y [CD-MD3000W]
Q201~211	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q212	VS2SA562-Y/-1	J	AC	Silicon,PNP,2SA562 Y
Q215	VSKTA1271Y/-1	J	AC	Silicon,PNP,KTA1271 Y
Q301	VS2SC380-O/-1	J	AC	Silicon,NPN,2SC380 O [CD-MD3000H Only]
Q302	VSKTC3194Y/-1	J	AD	Silicon,NPN,KTC3194 Y [CD-MD3000W Only]
Q351	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q360	VS2SB562-C/-1	J	AD	Silicon,PNP,2SB562 C
Q371	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q501,502	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q503	VSKRA107M//-1	J	AE	Digital,PNP,KRA107 M
Q504	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
Q507,508	VSDTC363TS/-1	J	AC	Digital,NPN,DTC363 TS
Q509	VSKRA107M//-1	J	AE	Digital,PNP,KRA107 M
Q707	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
Q708	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M
Q720~725	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M
Q801	VS2SD2012//-1	J	AD	Silicon,NPN,2SD2012
Q803	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q805	VSKTC2026//-1	J	AF	Silicon,NPN,KTC2026
Q806	VSKTA1046Y/-1	J	AC	Silicon,PNP,KTA1046 Y
Q807	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q809	VS2SD2012//-1	J	AD	Silicon,NPN,2SD2012
Q810	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q811	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M [CD-MD3000W Only]
Q812	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q813	VSKRA107M//-1	J	AE	Digital,PNP,KRA107 M
Q901	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q905	VS2SB561-C/-1	J	AC	Silicon,PNP,2SB561 C
Q906,907	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q908	VS2SB561-C/-1	J	AC	Silicon,PNP,2SB561 C
Q909	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q952,953	VS2SC1740SR-1	J	AB	Silicon,NPN,2SC1740 SR
Q1402	VSUN2113///-1	J	AB	Digital,PNP,UN2113
Q1403	VSUN2213///-1	J	AB	Digital,NPN,UN2213
Q1501	VSUN2214///-1	J	AB	Digital,NPN,UN2214
Q1700	VS2SD601AR/-1	J	AC	Silicon,NPN,2SD601 AR
Q1701	VSUN2213///-1	J	AB	Digital,NPN,UN2213
Q1702	VS2SA1162G/-1	J	AB	Silicon,PNP,2SA1162 G
Q1800	VSUN2214///-1	J	AB	Digital,NPN,UN2214
Q1801	VS2SA1162G/-1	J	AB	Silicon,PNP,2SA1162 G
Q1802	VSUN2214///-1	J	AB	Digital,NPN,UN2214
Q1803	VSUN221N///-1	J	AB	Digital,NPN,UN221 N
Q1804	VS2SA1242Y/-1	J	AE	Silicon,PNP,2SA1242 Y
Q1805	VS2SA1314C/-1	J	AD	Silicon,PNP,2SA1314 C
Q1806	VSUN221N///-1	J	AB	Digital,NPN,UN221 N
Q1807	VS2SD601AR/-1	J	AC	Silicon,NPN,2SD601 AR
QT21	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR [CD-MD3000H Only]
DIODES				
D201~208	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D210	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D301~306	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D310	VHDDS1SS133-1	J	AB	Silicon,DS1SS133 [CD-MD3000W Only]
D311,312	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D352	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D507,508	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D802	VHD1N4004S/-1	J	AB	Silicon,1N4004S
△ D804~807	VHD1N4004S/-1	J	AB	Silicon,1N4004S
△ D808~811	VHD2A02M+++X	J	AC	Silicon,2A02M
D812~815	VHD1N4004S/-1	J	AB	Silicon,1N4004S
△ D816,817	VHDT56B04GM-1	J	AP	Silicon,TS6B04GM
D818,819	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D821	VHDDS1SS133-1	J	AB	Silicon,DS1SS133 [CD-MD3000W Only]
D901,902	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D905~907	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D910	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D911	VHDDS1N404S-1	J	AB	Silicon,DS1N404S
D951	VHDDS1SS133-1	J	AB	Silicon,DS1SS133 [CD-MD3000W Only]
D952	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D1300	VHDSBE803/-1	J	AD	Silicon,SBE803
D1401	VHDSB00703Q-1	J	AB	Silicon,SB00703Q
D1402	VHD1SS355/-1	J	AB	Silicon,1SS355
DT31	VHDDS1SS133-1	J	AB	Silicon,DS1SS133 [CD-MD3000H Only]
DZ1	VHEMTZJ5R1A-1	J	AB	Zener,5.1V,MTZJ5.1A
DZ2	VHEMTZJ3R9B-1	J	AC	Zener,3.9V,MTZJ3.9B
DZ201	VHEMTZJ5R6B-1	J	AD	Zener,5.6V,MTZJ5.6B [CD-MD3000H]
DZ201	VHEMTZJ6R2B-1	J	AC	Zener,6.2V,MTZJ6.2B [CD-MD3000W]
DZ299	VHEMTZJ3R9B-1	J	AC	Zener,3.9V,MTZJ3.9B [CD-MD3000W Only]
DZ351	VHEDZ5R1BSB-1	J	AC	Zener,5.1V,DZ5.1BSB
DZ502	VHEMTZJ8R2B-1	J	AC	Zener,8.2V,MTZJ8.2B
DZ803	VHEMTZJ9R1B-1	J	AB	Zener,9.1V,MTZJ9.1B
DZ804	VHEMTZJ100B-1	J	AB	Zener,10V,MTZJ10B
DZ902	VHEMTZJ3R0A-1	J	AB	Zener,3V,MTZJ3.0A

CD-MD3000H/CD-MD3000W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
LED731	VHPLMP1700-1	J	AC	LED,Red,HLMP1700
LED735	VHPLNG995PF-1	J	AT	LED,Blue,LNG995PF
LED737,738	VHPLNG995PF-1	J	AT	LED,Blue,LNG995PF
LED754~759	VHPK5052UL/-1	J	AD	LED,Red,K5052UL
LED770	VHPL934MBC5-1	J	AL	LED,White,L934MBC5
LED772~775	VHPK5052UL/-1	J	AD	LED,Red,K5052UL
LED786	VHPK5052UL/-1	J	AD	LED,Red,K5052UL
LED801	VHPK5052UL/-1	J	AD	LED,Red,K5052UL

FILTERS

BF301	RFILR0008AWZZ	J	AE	Band Pass Filter [CD-MD3000W Only]
CF301	RFILF0072AFZZ	J	AG	FM IF [CD-MD3000H Only]
CF302	RFILF0072AFZZ	J	AG	FM IF [CD-MD3000H]
CF302	RFILF0124AFZZ	J	AD	FM IF,10.7 MHz [CD-MD3000W]
CF351	RFILF0003AWZZ	J	AK	FM IF
CF352	RFILA0009AWZZ	J	AE	AM IF
FL1501~1503	RFILN0001AWZZ	J	AD	EMI Filter
L354	RFILL0001AWZZ	J	AE	Low Pass Filter [CD-MD3000H Only]

TRANSFORMERS

T302	RCILA0062AWZZ	J	AC	AM Antenna
T306	RCILB0066AWZZ	J	AD	AM Oscillation
T311	RCILB0065AWZZ	J	AC	FM Oscillation [CD-MD3000W Only]
T312	RCILI0017AWZZ	J	AB	FM IF [CD-MD3000W Only]
T351	RCILI0019AWZZ	J	AD	AM IF
△ T801	RTRNP0325AWZZ	J	BG	Power [CD-MD3000H]
△ T801	RTRNP0347AWZZ	J		Power [CD-MD3000W]
△ T802	RTRNP0313AWZZ	J	AN	Power [CD-MD3000H]
△ T802	RTRNP0346AWZZ	J		Power [CD-MD3000W]

COILS

L1,2	VP-DHR82M0000	J	AB	0.82 μH,Playback PLL
L7	VP-DHR82M0000	J	AB	0.82 μH,Playback PLL
L104	VP-MK331K0000	J	AB	330 μH,Choke
L201~204	RCILZ0137AFZZ	J	AA	0.29 μH
L312	RCILR0056AWZZ	J	AB	FM RF [CD-MD3000W Only]
L341	RBLN-0001AWZZ	J	AD	Balun [CD-MD3000H Only]
L342	VP-DH2R2K0000	J	AB	2.2 μH,Peaking
L351,352	VP-DH101K0000	J	AB	100 μH,Choke
L353	VP-DH102K0000	J	AB	1 mH,Choke
L501,502	VP-DH2R2K0000	J	AB	2.2 μH,Peaking
L701,702	VP-XH2R2K0000	J	AB	2.2 μH,Choke
L705	VP-XH2R2K0000	J	AB	2.2 μH,Choke
△ L802	RCILZ0021AWZZ	J	AF	Line Filter
L901	VP-DH101K0000	J	AB	100 μH,Choke
L910	VP-YF470K0000	J	AB	47 μH,Choke
L911,912	VP-DH2R2K0000	J	AB	2.2 μH,Peaking
L1100	VPBNNR47K0000	J	AC	0.47 μH
L1101	VPBNN100K0000	J	AC	10 μH
L1200	VPBNN4R7K0000	J	AC	4.7 μH
L1201,1202	VPBNNR47K0000	J	AC	0.47 μH
L1300	RCILC0358AFZZ	J	AC	4.7 μH,Choke
L1501	RCILZ0016AWZZ	J	AD	1 μH
L1502	VPBNN4R7K0000	J	AC	4.7 μH
L1551,1552	VPBNNR47K0000	J	AC	0.47 μH
L1554	VPBNNR47K0000	J	AC	0.47 μH
L1600	RCILZ0016AWZZ	J	AD	1 μH
L1701,1702	VPBNN100K0000	J	AC	10 μH
LT21,22	VP-XH2R2K0000	J	AB	2.2 μH,Choke [CD-MD3000H Only]
R1512	RCILZ2134SCZZ	J		Impeder,1 kohm at 100 MHz
R1524	RCILZ2134SCZZ	J		Impeder,1 kohm at 100 MHz
R1528	RCILZ2134SCZZ	J		Impeder,1 kohm at 100 MHz
R1540	RCILZ2134SCZZ	J		Impeder,1 kohm at 100 MHz

VARIABLE RESISTOR

VR351	RVR-M0026AWZZ	J	AC	10 kohm (B),Semi-VR [FM Mute Level]
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VARIABLE CAPACITORS

VD301	VHCSVC348S/-1	J	AK	Variable Capacitance,SVC348S
VD302,303	VHCSVC211C/-1	J	AG	Variable Capacitance,SVC211C [CD-MD3000W Only]

VIBRATORS

X1	RCRSP0005AWZZ	J	AF	Crystal,16.934 MHz
X351	92LCRSTL1425A	J	AF	Crystal,456 kHz
X352	RCRSP0002AWZZ	J	AH	Crystal,4.5 MHz
X901	RCRM-0038AFZZ	J	AD	Ceramic,600 kHz
X902	RCRSP0011AWZZ	J	AC	Crystal,32.768 kHz
XL1201	RCRSC0001AWZZ	J	AL	Crystal,33.8688 MHz
XT21	RCRSP0010AWZZ	J	AH	Crystal,4.332 MHz [CD-MD3000H Only]

CAPACITORS

C1	VCEAZA1AW107M	J	AB	100 μF,10V,Electrolytic
C2,3	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C4	VCEAZA1AW107M	J	AB	100 μF,10V,Electrolytic
C5,6	VCEAZA1CW106M	J	AC	10 μF,16V,Electrolytic
C7	VCEAZA1AW107M	J	AB	100 μF,10V,Electrolytic
C8	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C10	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C11	VCCSMN1HL150J	J	AA	15 pF,50V
C12	VCCSMN1HL220J	J	AA	22 pF,50V
C13,14	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C15~17	VCKYPA1HF473Z	J	AB	0.047 μF,50V
C18	VCQYKA1HM333J	J	AB	0.033 μF,50V,Mylar
C19	VCKYPA1HF473Z	J	AB	0.047 μF,50V
C20	VCCSMN1HL470J	J	AA	47 pF,50V
C21	VCKYMN1HB102K	J	AA	0.001 μF,50V
C22	VCQYKA1HM333J	J	AB	0.033 μF,50V,Mylar
C23	VCTYMN1CY103K	J	AA	0.01 μF,16V
C24	VCTYMN1CX272K	J	AA	0.0027 μF,16V
C25	VCTYMN1CY103K	J	AA	0.01 μF,16V
C26	VCTYMN0JY153M	J	AA	0.015 μF,6.3V
C27	VCTYMN1CX472K	J	AA	0.0047 μF,16V
C28,29	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C30	VCEAZA1AW476M	J	AB	47 μF,10V,Electrolytic
C31	VCEAZA1AW227M	J	AC	220 μF,10V,Electrolytic
C32,33	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C34	VCCSMN1HL220J	J	AA	22 pF,50V
C36	VCCSMN1HL270J	J	AA	27 pF,50V
C37	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C38	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic
C39	VCCSMN1HL3R9C	J	AA	3.9 pF,50V
C40,41	VCQYKA1HM104K	J	AB	0.1 μF,50V,Mylar
C42	VCTYMN1CX682K	J	AA	0.0068 μF,16V
C43	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C44	VCEAZA1AW227M	J	AC	220 μF,10V,Electrolytic
C45	VCEAZA1AW477M	J	AC	470 μF,10V,Electrolytic
C46	VCTYMN1EF223Z	J	AA	0.022 μF,25V
C47,48	VCEAZA1AW107M	J	AB	100 μF,10V,Electrolytic
C49,50	VCTYPA1HF104Z	J	AB	0.1 μF,50V
C51	VCEAZA1AW107M	J	AB	100 μF,10V,Electrolytic
C58~60	VCKYMN1HB101K	J	AA	100 pF,50V
C64,65	VCKYBT1HB102K	J	AA	0.001 μF,50V
C67	VCKYPA1HB102K	J	AA	0.001 μF,50V
C68	VCTYPA1HF223Z	J		0.022 μF,50V
C91,92	VCKYMN1HB471J	J	AB	470 pF,50V
C93~99	VCKYMN1HB101K	J	AA	100 pF,50V
C101,102	VCKYPA1HB181K	J	AA	180 pF,50V
C103	VCEAZA1CW106M	J	AC	10 μF,16V,Electrolytic
C104,105	VCKYPA1HB561K	J	AA	560 pF,50V
C106,107	VCTYPA1EX333K	J	AA	0.033 μF,25V
C108,109	VCCSPA1HL331J	J	AA	330 pF,50V
C110,111	VCEAZA1EW476M	J	AB	47 μF,25V,Electrolytic
C112,113	VCKYPA1HB561K	J	AA	560 pF,50V
C116	VCEAZA1HW335M	J	AB	3.3 μF,50V,Electrolytic
C118	VCKYPA1HF223Z	J	AB	0.022 μF,50V
C119,120	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic
C121,122	VCKYPA1HB271K	J	AA	270 pF,50V
C123,124	VCTYPA1EX223K	J	AA	0.022 μF,25V
C125,126	VCEAZA1HW226M	J	AB	22 μF,50V,Electrolytic
C127	VCKYPA1HB332K	J	AA	0.0033 μF,50V
C129,130	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic
C131	VCEAZA1HW226M	J	AB	22 μF,50V,Electrolytic
C132	VCEAZA1CW227M	J	AC	220 μF,16V,Electrolytic
C133	VCQYKA1HM393K	J	AB	0.039 μF,50V,Mylar
C134	VCEAZA1EW476M	J	AB	47 μF,25V,Electrolytic
C135	VCQYKA1HM473K	J	AB	0.047 μF,50V,Mylar
C137	VCQPKA2AA822J	J	AA	0.0082 μF,100V,Polypropylene
C138	VCKYPA1HB332K	J	AA	0.0033 μF,50V
C140,141	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic

CD-MD3000H/CD-MD3000W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C200	VCEAZA1CW476M	J	AB	47 μF,16V,Electrolytic
C201,202	VCCSPA1HL221J	J	AA	220 pF,50V
C203,204	VCEAZA1HW476M	J	AB	47 μF,50V,Electrolytic
C205,206	VCCSPA1HL150J	J	AA	15 pF,50V
C207,208	VCIFYHA1HA154J	J	AC	0.15 μF,50V,Thin Film
C209,210	VCEAZA1HW107M	J	AC	100 μF,50V,Electrolytic
C211,212	VCQYKA1HM154K	J	AB	0.15 μF,50V,Mylar
C213,214	VCKYPA1HF223Z	J	AB	0.022 μF,50V
C215,216	VCKZPA1HF223Z	J	AA	0.022 μF,50V
C217,218	VCCCPA1HH101J	J	AA	100 pF (CH),50V
C219,220	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic
C221,222	VCQYKA1HM153K	J	AB	0.015 μF,50V,Mylar
C223,224	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic
C225,226	VCCCPA1HH221J	J	AA	220 pF (CH),50V
C227,228	VCEAZA1HW225M	J	AB	2.2 μF,50V,Electrolytic
C229,230	VCIFYHA1HA154J	J	AC	0.15 μF,50V,Thin Film
C231,232	VCCSPA1HL221J	J	AA	220 pF,50V [CD-MD3000W]
C231,232	VCKYPA1HB152K	J	AA	0.0015 μF,50V [CD-MD3000H]
C233,234	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic
C235,236	VCCSPA1HL150J	J	AA	15 pF,50V
C237,238	VCEAZA1HW107M	J	AC	100 μF,50V,Electrolytic
C239,240	VCKZPA1HF223Z	J	AA	0.022 μF,50V
C241,242	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic
C243~246	VCQYKA1HM104K	J	AB	0.1 μF,50V,Mylar
C247	VCEAZA1HW476M	J	AB	47 μF,50V,Electrolytic
C248	VCKYPA1HF223Z	J	AB	0.022 μF,50V
C249	VCEAZA1EW476M	J	AB	47 μF,25V,Electrolytic
C250	VCQYKA1HM223K	J	AB	0.022 μF,50V,Mylar
C251	VCEAZA1HW476M	J	AB	47 μF,50V,Electrolytic
C252	VCEAZW1HW228M	J	AH	2200 μF,50V,Electrolytic
C253,254	RC-EZ0027AWZZ	J	AN	3300 μF,63V,Electrolytic
C255	VCEAZW1HW228M	J	AH	2200 μF,50V,Electrolytic
C256	VCEAZA1HW476M	J	AB	47 μF,50V,Electrolytic
C257	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic
C258	VCEAZA1CW107M	J	AC	100 μF,16V,Electrolytic
C259	VCKYBT1HB103K	J	J	0.01 μF,50V[CD-MD3000H Only]
C260	VCKYPA1HF103Z	J	AB	0.01 μF,16V[CD-MD3000H Only]
C261	VCKYBT1HB103K	J	J	0.01 μF,50V[CD-MD3000H Only]
C262	VCKYPA1HF103Z	J	AB	0.01 μF,16V[CD-MD3000H Only]
C263	VCKYBT1HB103K	J	J	0.01 μF,50V[CD-MD3000H Only]
C264	VCKYPA1HF103Z	J	AB	0.01 μF,16V[CD-MD3000H Only]
C265	VCKYBT1HB103K	J	J	0.01 μF,50V[CD-MD3000H Only]
C266	VCKYPA1HF103Z	J	AB	0.01 μF,16V[CD-MD3000H Only]
C267	VCKYBT1HB103K	J	J	0.01 μF,50V[CD-MD3000H Only]
C268	VCKYPA1HF103Z	J	AB	0.01 μF,16V[CD-MD3000H Only]
C269	VCKYBT1HB103K	J	J	0.01 μF,50V[CD-MD3000H Only]
C270	VCKYPA1HF103Z	J	AB	0.01 μF,16V[CD-MD3000H Only]
C271	VCKYBT1HB103K	J	J	0.01 μF,50V[CD-MD3000H Only]
C272~274	VCKYPA1HF103Z	J	AB	0.01 μF,16V[CD-MD3000H Only]
C277~282	VCKYPA1HB102K	J	AA	0.001 μF,50V [CD-MD3000H Only]
C301	VCKYCY1HB102K	J	AA	0.001 μF,50V
C302	VCKYCY1HB102K	J	AA	0.001 μF,50V [CD-MD3000H Only]
C303	VCCCCY1HH100D	J	AA	10 pF (CH),50V[CD-MD3000W Only]
C304	VCKYCY1HB103K	J	AA	0.01 μF,50V [CD-MD3000W Only]
C305	VCCCCY1HHSR0C	J	AA	5 pF (CH),50V [CD-MD3000W Only]
C306	VCKYBT1HB102K	J	AA	0.001 μF,50V [CD-MD3000W Only]
C308	VCCCCY1HHSR0C	J	AA	5 pF (CH),50V [CD-MD3000W Only]
C309	VCKYCY1HB102K	J	AA	0.001 μF,50V [CD-MD3000W Only]
C310~312	VCCCCY1HH101J	J	AA	100 pF (CH),50V
C313	VCCCCY1HH220J	J	AA	22 pF (CH),50V[CD-MD3000W Only]
C314,315	VCKYCY1HB472K	J	AA	0.0047 μF,50V [CD-MD3000W Only]
C316	VCKYCY1EF104Z	J	AA	0.1 μF,25V [CD-MD3000W Only]
C317	VCKYCY1HB102K	J	AA	0.001 μF,50V [CD-MD3000W Only]
C318	VCCCCY1HH101J	J	AA	100 pF (CH),50V[CD-MD3000W Only]
C319	VCTYPA1EX104K	J	AB	0.1 μF,25V
C320	VCTYPA1EX473K	J	AA	0.047 μF,25V
C321	VCEAZA1CW107M	J	AC	100 μF,16V,Electrolytic
C323	VCKYCY1EB223K	J	AB	0.022 μF,25V
C324	VCCCCY1HH4R0C	J	AA	4 pF (CH),50V [CD-MD3000W Only]
C325	VCCCCY1HH150J	J	AA	15 pF (CH),50V [CD-MD3000W Only]
C326	VCCCCY1HH180J	J	AA	18 pF (CH),50V [CD-MD3000W Only]
C327	VCKYCY1EF104Z	J	AA	0.1 μF,25V [CD-MD3000W Only]
C330	VCCCCY1HH180J	J	AA	18 pF (CH),50V
C331	VCKYPA1HF473Z	J	AB	0.047 μF,50V
C332	VCKYCY1EB223K	J	AB	0.022 μF,25V
C334	VCCCCY1HH180J	J	AA	18 pF (CH),50V
C335	VCCCCY1HH331J	J	AA	330 pF (CH),50V
C337	VCKYCY1EB223K	J	AB	0.022 μF,25V
C338	VCKYCY1HB102K	J	AA	0.001 μF,50V
C339	VCCCCY1HH101J	J	AA	100 pF (CH),50V
C341	VCKYCY1EF104Z	J	AA	0.1 μF,25V
C342	VCKYCY1EB223K	J	AB	0.022 μF,25V

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C343	VCCCCY1HH330J	J	AA	33 pF (CH),50V
C345~347	VCKYCY1EB223K	J	AB	0.022 μF,25V
C350	VCKYCY1CB473K	J	AA	0.047 μF,16V
C351	VCKYCY1EB223K	J	AB	0.022 μF,25V
C352	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic
C353,354	VCKYCY1EB223K	J	AB	0.022 μF,25V
C355	VCCCCY1HH220J	J	AA	22 pF (CH),50V
C356	VCKYCY1HB102K	J	AA	0.001 μF,50V
C357	VCEAZA1HW225M	J	AB	2.2 μF,50V,Electrolytic
C358	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic
C361	VCKYCY1EB223K	J	AB	0.022 μF,25V
C362	VCEAZA1HW335M	J	AB	3.3 μF,50V,Electrolytic
C363	VCKYCY1EB223K	J	AB	0.022 μF,25V
C364	VCEAZA1HW475M	J	AB	4.7 μF,50V,Electrolytic
C365	VCKYCY1EB223K	J	AB	0.022 μF,25V
C366	VCKYCY1HB102K	J	AA	1000 pF,50V
C367,368	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic
C370~372	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic
C373,374	VCKYCY1EB223K	J	AB	0.022 μF,25V [CD-MD3000H]
C373,374	VCKYCY1HB153K	J	AA	0.015 μF,50V [CD-MD3000W]
C380	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic
C381	VCCCCY1HH120J	J	AA	12 pF (CH),50V
C382	VCCCCY1HH150J	J	AA	15 pF (CH),50V
C384	VCKYCY1HB102K	J	AA	1000 pF,50V
C385	VCKYCY1HB103K	J	AA	0.01 μF,50V
C386	VCCCCY1HH331J	J	AA	330 pF (CH),50V
C387	VCKYCY1EB223K	J	AB	0.022 μF,25V
C389,390	VCKYCY1HB102K	J	AA	1000 pF,50V
C391	VCEAZA1CW476M	J	AB	47 μF,16V,Electrolytic
C392	VCKYCY1HB102K	J	AA	1000 pF,50V
C393	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic
C394	VCEAZA1CW476M	J	AB	47 μF,16V,Electrolytic
C395	VCKYCY1EB223K	J	AB	0.022 μF,25V
C396	VCEAZA1CW107M	J	AC	100 μF,16V,Electrolytic
C397	VCKYCY1EB223K	J	AB	0.022 μF,25V
C398	VCEAZA1CW107M	J	AC	100 μF,16V,Electrolytic
C399	VCKYCY1EB223K	J	AB	0.022 μF,25V
C501,502	VCKYCY1HB102K	J	AA	0.001 μF,50V
C503	VCEAZA1HW226M	J	AB	22 μF,50V,Electrolytic
C506,507	VCEAZA1EW476M	J	AB	47 μF,25V,Electrolytic
C508	VCKYCY1EF104Z	J	AA	0.1 μF,25V
C509,510	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic
C511~514	VCIFYHA1HA104J	J	AB	0.1 μF,50V,Thin Film
C515,516	VCQYKA1HM272K	J	AA	0.0027 μF,50V,Mylar
C517~528	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic
C529,530	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic
C531,532	VCCCCY1HH101J	J	AA	100 pF (CH),50V
C533,534	VCCCCY1HH470J	J	AA	47 pF (CH),50V
C535	VCKYCY1EF104Z	J	AA	0.1 μF,25V
C536	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic
C537	VCKYCY1EF104Z	J	AA	0.1 μF,25V
C540,541	VCKYCY1HB391K	J	AA	390 pF,50V
C550,551	VCEAZA1HW226M	J	AB	22 μF,50V,Electrolytic
C562	VCKYCY1EF104Z	J	AA	0.1 μF,25V
C563	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic
C564,565	VCKYCY1EF104Z	J	AA	0.1 μF,25V
C566	VCEAZA1HW226M	J	AB	22 μF,50V,Electrolytic
C573,574	VCEAZA1HW225M	J	AB	1 μF,50V,Electrolytic
C597,598	VCKYCY1HB272K	J	AA	0.0027 μF,50V
C599	VCKYCY1HB102K	J	AA	0.001 μF,50V
C703	VCTYBT1EF223Z	J	AA	0.022 μF,25V
C704,705	VCCSPA1HL100J	J	AA	10 pF,50V
C706	VCKYPA1HF223Z	J	AB	0.022 μF,50V
C707	VCKYBT1HB101K	J	AA	100 pF,50V
C708	VCTYBT1EF223Z	J	AA	0.022 μF,25V
C709	VCEAZA1EW476M	J	AB	47 μF,25V,Electrolytic
C710,711	VCCCPA1HH101J	J	AA	100 pF (CH),50V
C712	VCKYBT1HB102K	J	AA	0.001 μF,50V
C713	VCKYPA1HB102K	J	AA	0.001 μF,50V
C714	VCEAZA1CW476M	J	AB	47 μF,16V,Electrolytic
C715	VCTYPA1CX104K	J	AB	0.1 μF,16V
C716	VCEAZA1HW225M	J	AB	2.2 μF,50V,Electrolytic
C801,802	VCKYPA1HF223Z	J	AB	0.022 μF,50V
C807	VCQYKA1HM473K	J	AB	0.047 μF,50V,Mylar
C810	VCEAZA1HW226M	J	AB	22 μF,50V,Electrolytic
C811	VCKYPA1HB102K	J	AA	0.001 μF,50V
C814	VCEAZA1EW476M	J	AB	47 μF,25V,Electrolytic
C815,816	VCIFYHA1HA104J	J	AB	0.1 μF,50V,Thin Film
C817	VCEAZW1EW688M	J	AL	6800 μF,25V,Electrolytic
C818	VCEAZW1CW688M	J		6800 μF,16V,Electrolytic
C819	VCEAZW1EW477M	J		470 μF,25V,Electrolytic
C820	VCQYKA1HM473K	J	AB	0.047 μF,50V,Mylar

CD-MD3000H/CD-MD3000W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION	NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C821	VCEAZA1EW107M	J	AB	100 μF,25V,Electrolytic	C1300	VCCCTV1HH470J	J	AA	47 pF (CH),50V
C822	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic	C1301	VCKYCY1CB273K	J	AA	0.027 μF,16V
C823	VCEAZA1CW107M	J	AC	100 μF,16V,Electrolytic	C1302	RC-KZ0002AWZZ	J	AE	10 μF,10V
C824	VCQYKA1HM473K	J	AB	0.047 μF,50V,Mylar	C1303	VCKYTV1CF105Z	J	AB	1 μF,16V
C825	VCEAZA0JW108M	J	AC	1000 μF,6.3V,Electrolytic	C1304	VCCCTV1HH221J	J	AA	220 pF (CH),50V
C826~829	VCFYHA1HA224J	J	AC	0.22 μF,50V,Thin Film	C1402	VCKYCY1CB223K	J	AA	0.022 μF,16V
C830	VCEAZV1VW477M	J	AD	470 μF,35V,Electrolytic	C1403	VCKYCY1EF104Z	J	AA	0.1 μF,25V
C831~834	VCFYHA1HA224J	J	AC	0.22 μF,50V,Thin Film	C1404	VCKYCY1CB473K	J	AA	0.047 μF,16V
C835	VCQYKA1HM473K	J	AB	0.047 μF,50V,Mylar	C1405,1406	VCKYCY1HB681K	J	AA	680 pF,50V
△ C836	RC-KZ002LAWZZ	J	AE	0.0047 μF,250V,Ceramic	C1407	VCKYCY1CB473K	J	AA	0.047 μF,16V
C837	VCKYPA1HF223Z	J	AB	0.022 μF,50V	C1409	VCKYTV1CF105Z	J	AB	1 μF,16V
C838	VCEAZA1CW227M	J	AC	220 μF,16V,Electrolytic	C1411	VCKYCY1CB223K	J	AA	0.022 μF,16V
C839	VCEAZA1CW107M	J	AC	100 μF,16V,Electrolytic	C1501	VCKYTV1CF105Z	J	AB	1 μF,16V
C840	VCKYPA1HF223Z	J	AB	0.022 μF,50V	C1502	VCCCTV1HH331J	J	AA	330 pF (CH),50V
C842	VCEAZA1AW107M	J	AB	100 μF,10V,Electrolytic [CD-MD3000W Only]	C1503	VCKYTV1CB334K	J	AC	0.33 μF,16V
C844	VCEAZA1HW335M	J	AB	3.3 μF,50V,Electrolytic	C1505	VCKYCY1CB473K	J	AA	0.047 μF,16V
C901	VCEAZA0JW108M	J	AC	1000 μF,6.3V,Electrolytic	C1506	VCCCCY1HH101J	J	AA	100 pF (CH),50V
C902	VCKYCY1EF104Z	J	AA	0.1 μF,25V	C1507	VCKYCY1CB473K	J	AA	0.047 μF,16V
C903	VCEAZA1HW104M	J	AB	0.1 μF,50V,Electrolytic	C1509	VCCCCY1HH101J	J	AA	100 pF (CH),50V
C904	VCKYCY1HB103K	J	AA	0.01 μF,50V	C1601~1604	VCCSCY1HL821J	J	AA	820 pF,50V
C905	VCEAZA1HW335M	J	AB	3.3 μF,50V,Electrolytic	C1606	RC-KZ0002AWZZ	J	AE	10 μF,10V
C906	VCKYCY1EF104Z	J	AA	0.1 μF,25V	C1607	VCKYTV1CF105Z	J	AB	1 μF,16V
C907	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic	C1610	RC-KZ0003AWZZ	J	AE	4.7 μF,10V
C912	VCEAZA1CW476M	J	AB	47 μF,16V,Electrolytic	C1611,1612	VCKYCY1HB562K	J	AA	0.0056 μF,50V
C913	VCEAZA1HW225M	J	AB	2.2 μF,50V,Electrolytic	C1613	VCKYCY1EB153K	J	AA	0.015 μF,25V
C914	VCKYCY1EF104Z	J	AA	0.1 μF,25V	C1615	VCKYCY1EB153K	J	AA	0.015 μF,25V
C916,917	VCKYCY1EF104Z	J	AA	0.1 μF,25V	C1616	VCEAPS107AF1A	J	AD	100 μF,10V,Electrolytic
C936	VCCCCY1HH101J	J	AA	100 pF (CH),50V	C1619	VCCCCY1HH331J	J	AA	330 pF (CH),50V
C941	VCCCCY1HH220J	J	AA	22 pF (CH),50V	C1655	VCKYCY1EB153K	J	AA	0.015 μF,25V
C942	VCCCCY1HH180J	J	AA	18 pF (CH),50V	C1700,1701	VCEAPS476AF0G	J	AC	47 μF,4V,Electrolytic
C943	VCKYCY1EF104Z	J	AA	0.1 μF,25V	C1702	VCKYCY1HB102K	J	AA	0.001 μF,50V
C945	VCKYCY1EF104Z	J	AA	0.1 μF,25V	C1703	VCKYCY1EF104Z	J	AA	0.1 μF,25V
C950	VCCCCY1HH151J	J	AA	150 pF (CH),50V	C1704	VCEAPS476AF0G	J	AC	47 μF,4V,Electrolytic
C951,952	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic	C1705	VCKYCY1EF104Z	J	AA	0.1 μF,25V
C955,956	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic	C1706	VCKYTV1HF103Z	J	AA	0.01 μF,50V
C957	VCCCCY1HH151J	J	AA	150 pF (CH),50V	C1707	VCKYTV1CF105Z	J	AB	1 μF,16V
C958	VCKYCY1HB391K	J	AA	390 pF,50V	C1708,1709	VCKYTV1HF103Z	J	AA	0.01 μF,50V
C964	VCTYPA1HF104Z	J	AB	0.1 μF,50V	C1710	RC-EZ1620AFZZ	J	AC	10 μF,16V,Electrolytic
C970,971	VCKYCY1EF104Z	J	AA	0.1 μF,25V	C1711	VCEAPS476AF0G	J	AC	47 μF,4V,Electrolytic
C972	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic	C1712	RC-EZ1620AFZZ	J	AC	10 μF,16V,Electrolytic
C973,974	VCKYCY1EF104Z	J	AA	0.1 μF,25V	C1713	VCKYTV1HF103Z	J	AA	0.01 μF,50V
C975	VCEAZA1HW105M	J	AB	1 μF,50V,Electrolytic	C1714	VCKYTV1CF105Z	J	AB	1 μF,16V
C976	VCKYCY1EF104Z	J	AA	0.1 μF,25V	C1715	VCKYTV1CB104K	J	AA	0.1 μF,16V
C977	VCCCCY1HH101J	J	AA	100 pF (CH),50V	C1716	VCEAPS476AF0G	J	AC	47 μF,4V,Electrolytic
C979	VCKYCY1EF104Z	J	AA	0.1 μF,25V	C1741	VCCSCY1HL821J	J	AA	820 pF,50V
C995	VCCCCY1HH101J	J	AA	100 pF (CH),50V	C1750	VCCSCY1HL821J	J	AA	820 pF,50V
C998	RC-GZA226AF1A	J	AB	22 μF,10V,Electrolytic	C1800	VCEAPS227AF0G	J	AC	220 μF,4V,Electrolytic
C999	VCKYCY1HB681K	J	AA	680 pF,50V	C1801,1802	RC-KZ0002AWZZ	J	AE	10 μF,10V
C1003	VCEAZA1HW476M	J	AB	47 μF,50V,Electrolytic	C1803	VCEAPS107AF1A	J	AD	100 μF,10V,Electrolytic
C1004,1005	VCKYCY1EF104Z	J	AA	0.1 μF,25V	C1804	VCKYTV1CF225Z	J	AB	2.2 μF,16V
C1006	VCEAZA1HW476M	J	AB	47 μF,50V,Electrolytic	C1805,1806	VCKYTV1CF105Z	J	AB	1 μF,16V
C1012	VCKYBT1HB102K	J	AA	0.001 μF,50V	CT21	VCEAZA1CW107M	J	AC	100 μF,16V,Electrolytic [CD-MD3000H Only]
C1013	VCTYBT1EF223Z	J	AA	0.022 μF,25V	CT22	VCKYCY1CB223K	J	AA	0.022 μF,16V [CD-MD3000H Only]
C1100	RC-KZ0003AWZZ	J	AE	4.7 μF,10V	CT23	VCEAZA1HW106M	J	AB	10 μF,50V,Electrolytic [CD-MD3000H Only]
C1107	VCKYCY1CB333K	J	AA	0.033 μF,16V	CT24	VCKYCY1EB223K	J	AB	0.022 μF,25V [CD-MD3000H Only]
C1110	VCKYTV0JB105K	J	AD	1 μF,6.3V	CT25	VCKYCY1HB561K	J	AA	560 pF,50V [CD-MD3000H Only]
C1111	VCKYTV1CF105Z	J	AB	1 μF,16V	CT26,27	VCCCCY1HH220J	J	AA	22 pF (CH),50V [CD-MD3000H Only]
C1112	VCCCCY1HH5R0C	J	AA	5 pF (CH),50V	CT28	VCEAZA1CW107M	J	AC	100 μF,16V,Electrolytic [CD-MD3000H Only]
C1113	VCKYTV0JB105K	J	AD	1 μF,6.3V	CT29	VCKYCY1CB223K	J	AA	0.022 μF,16V [CD-MD3000H Only]
C1114,1115	VCKYCY1CB104K	J	AB	0.1 μF,16V	CT36	VCKYCY1CB223K	J	AA	0.022 μF,16V [CD-MD3000H Only]
C1116,1117	VCKYTV0JB105K	J	AD	1 μF,6.3V	CT37	VCKYCY1EF104Z	J	AA	0.1 μF,25V [CD-MD3000H Only]
C1118,1119	VCKYTV1CB474K	J	AC	0.47 μF,16V	R1707	VCCCCY1HH331J	J	AA	330 pF (CH),50V
C1121	VCKYTV1CB224K	J	AB	0.22 μF,16V	R1710	VCCCCY1HH331J	J	AA	330 pF (CH),50V
C1122	VCKYTV0JB105K	J	AD	1 μF,6.3V					
C1123	VCKYCY1CB104K	J	AB	0.1 μF,16V					
C1124	VCKYTV1CB224K	J	AB	0.22 μF,16V					
C1125	VCKYTV1CF105Z	J	AB	1 μF,16V					
C1200	VCKYTV1CF105Z	J	AB	1 μF,16V					
C1201	RC-KZ0002AWZZ	J	AE	10 μF,10V					
C1202,1203	VCKYTV1CF105Z	J	AB	1 μF,16V					
C1204	VCKYCY1CB473K	J	AA	0.047 μF,16V					
C1205	VCKYTV1CF105Z	J	AB	1 μF,16V					
C1206	VCKYCY1CB104K	J	AB	0.1 μF,16V					
C1207	VCKYTV1CF105Z	J	AB	1 μF,16V					
C1208,1209	VCCCCY1HH120J	J	AA	12 pF (CH),50V					
C1210	VCCCCY1HH220J	J	AA	22 pF (CH),50V					
C1211	VCKYCY1EF104Z	J	AA	0.1 μF,25V					
C1230	VCKYTV1CF105Z	J	AB	1 μF,16V					
C1232	VCKYTV1HB102K	J	AA	0.001 μF,50V					
C1261~1265	VCCCCY1HH271J	J	AA	270 pF (CH),50V					
C1266	VCCCCY1HH270J	J	AA	27 pF (CH),50V					

RESISTORS

	VRD-MN2BD000C	J	AA	0 ohm,Jumper,ø1.4×3.5mm,Ivory
	VRS-CY1JB000J	J	AA	0 ohm,Jumper,0.8×1.55mm,Green
△ FR213,214	VRG-ST2EC101J	J	AB	100 ohm,1/4W,Fusible
△ FR251,252	VRG-ST2EC101J	J	AB	100 ohm,1/4W,Fusible
R6	VRD-ST2EE121J	J	AA	120 ohms,1/4W
R7~13	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R14	VRD-ST2CD820J	J	AA	82 ohms,1/6W
R15	VRD-ST2CD331J	J	AA	330 ohms,1/6W
R16	VRD-MN2BD101J	J	AA	100 ohm,1/8W
R17	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R18	VRD-MN2BD101J	J	AA	100 ohm,1/8W
R19	VRD-MN2BD105J	J	AA	1 Mohm,1/8W
R21	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W

CD-MD3000H/CD-MD3000W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION	NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R25	VRD-MN2BD562J	J	AA	5.6 kohms, 1/8W	R231,232	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R27	VRD-ST2CD473J	J	AA	47 kohms, 1/6W	R233,234	VRD-ST2CD104J	J	AA	100 kohm, 1/6W
R28	VRD-MN2BD473J	J	AA	47 kohms, 1/8W	R235,236	VRD-ST2CD182J	J	AA	1.8 kohms, 1/6W
R29	VRD-MN2BD104J	J	AA	100 kohm, 1/8W	R237,238	VRD-ST2CD683J	J	AA	68 kohms, 1/6W
R30	VRD-MN2BD225J	J	AA	2.2 Mohms, 1/8W	R239,240	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R31	VRD-MN2BD103J	J	AA	10 kohm, 1/8W	R241,242	VRD-ST2CD683J	J	AA	68 kohms, 1/6W
R32	VRD-MN2BD153J	J	AA	15 kohms, 1/8W	R243,244	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R35	VRD-MN2BD102J	J	AA	1 kohm, 1/8W	R245,246	VRD-ST2CD821J	J	AA	820 ohms, 1/6W
R36	VRD-MN2BD222J	J	AA	2.2 kohms, 1/8W	R247,248	VRD-ST2CD563J	J	AA	56 kohms, 1/6W
R37	VRD-MN2BD333J	J	AA	33 kohms, 1/8W	R249,250	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R38	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R251	VRD-ST2CD103J	J	AA	10 kohm, 1/6W
R39	VRD-MN2BD103J	J	AA	10 kohm, 1/8W	R252	VRD-RT2HD1R8J	J	AA	1.8 ohms, 1/2W [CD-MD3000W Only]
R40	VRD-MN2BD101J	J	AA	100 ohm, 1/8W	R253	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R41	VRD-MN2BD332J	J	AA	3.3 kohms, 1/8W	R254	VRD-ST2CD103J	J	AA	10 kohm, 1/6W
R42	VRD-MN2BD563J	J	AA	56 kohms, 1/8W	R255,256	VRN-VV3AAR10J	J	AB	0.1 ohm, 1W
R43	VRD-MN2BD821J	J	AA	820 ohms, 1/8W	R257,258	VRD-ST2CD103J	J	AA	10 kohm, 1/6W
R44	VRD-MN2BD683J	J	AA	68 kohms, 1/8W	R259,260	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R45	VRD-MN2BD822J	J	AA	8.2 kohms, 1/8W	R261~264	VRD-ST2CD563J	J	AA	56 kohms, 1/6W
R46	VRD-MN2BD122J	J	AA	1.2 kohms, 1/8W	R265,266	VRD-RT2HD4R7J	J	AA	4.7 ohms, 1/2W
R47	VRD-MN2BD103J	J	AA	10 kohm, 1/8W	R267~270	VRD-RT2HD331J	J	AA	330 ohms, 1/2W
R48	VRD-ST2EE100J	J	AA	10 ohm, 1/4W	R271,272	VRD-RT2HD4R7J	J	AA	4.7 ohms, 1/2W
R49,50	VRD-ST2CD122J	J	AA	1.2 kohms, 1/6W	R273~276	VRD-ST2CD223J	J	AA	22 kohms, 1/6W
R51	VRD-MN2BD683J	J	AA	68 kohms, 1/8W	R277	VRD-ST2CD331J	J	AA	330 ohms, 1/6W
R53	VRD-MN2BD683J	J	AA	68 kohms, 1/8W	R278	VRD-ST2CD563J	J	AA	56 kohms, 1/6W
R54	VRD-MN2BD473J	J	AA	47 kohms, 1/8W	R280	VRD-ST2CD563J	J	AA	56 kohms, 1/6W
R55,56	VRD-MN2BD683J	J	AA	68 kohms, 1/8W	R281	VRD-RT2HD120J	J	AA	12 ohms, 1/2W [CD-MD3000H Only]
R57	VRD-MN2BD473J	J	AA	47 kohms, 1/8W	R283	VRD-ST2CD474J	J	AA	470 kohms, 1/6W
R71,72	VRD-MN2BD103J	J	AA	10 kohm, 1/8W	R284	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R73,74	VRD-MN2BD822J	J	AA	8.2 kohms, 1/8W	R285~292	VRD-ST2EE6R8J	J	AA	6.8 ohms, 1/4W [CD-MD3000H Only]
R75,76	VRD-ST2CD103J	J	AA	10 kohm, 1/6W	R295	VRD-ST2CD102J	J	AA	1 kohm, 1/6W [CD-MD3000W Only]
R77,78	VRD-MN2BD822J	J	AA	8.2 kohms, 1/8W	R296	VRD-ST2CD224J	J	AA	220 kohms, 1/6W [CD-MD3000W Only]
R79	VRD-MN2BD101J	J	AA	100 ohm, 1/8W	R297,298	VRD-ST2CD223J	J	AA	22 kohms, 1/6W
R80	VRD-ST2CD101J	J	AA	100 ohm, 1/6W	R299	VRD-ST2CD391J	J	AA	390 ohms, 1/6W [CD-MD3000W]
R81	VRD-MN2BD101J	J	AA	100 ohm, 1/8W	R299	VRD-ST2CD392J	J	AA	3.9 kohms, 1/6W [CD-MD3000H]
R91,92	VRD-MN2BD473J	J	AA	47 kohms, 1/8W	R302	VRD-ST2CD100J	J	AA	10 ohm, 1/6W [CD-MD3000W Only]
R101	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R309	VRD-ST2CD103J	J	AA	10 kohm, 1/6W [CD-MD3000W Only]
R102,103	VRD-ST2CD222J	J	AA	2.2 kohms, 1/6W	R311	VRD-CY1JB104J	J	AA	100 kohm, 1/16W [CD-MD3000W Only]
R104	VRD-ST2CD562J	J	AA	5.6 kohms, 1/6W	R313	VRD-CY1JB333J	J	AA	33 kohms, 1/16W [CD-MD3000W Only]
R105	VRD-ST2CD101J	J	AA	100 ohm, 1/6W	R314	VRD-ST2CD220J	J	AA	22 ohms, 1/6W [CD-MD3000W Only]
R109	VRD-ST2CD153J	J	AA	15 kohms, 1/6W	R322	VRD-CY1JB271J	J	AA	270 ohms, 1/16W [CD-MD3000W Only]
R114,115	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R323	VRD-CY1JB683J	J	AA	68 kohms, 1/16W
R116,117	VRD-ST2CD560J	J	AA	56 ohms, 1/6W	R325	VRD-CY1JB473J	J	AA	47 kohms, 1/16W [CD-MD3000W Only]
R118,119	VRD-ST2CD104J	J	AA	100 kohm, 1/6W	R327	VRD-ST2CD330J	J	AA	33 ohms, 1/6W [CD-MD3000W Only]
R120,121	VRD-ST2CD392J	J	AA	3.9 kohms, 1/6W	R336	VRD-ST2CD103J	J	AA	10 kohm, 1/6W
R124,125	VRD-ST2CD562J	J	AA	5.6 kohms, 1/6W	R344	VRD-ST2CD471J	J	AA	470 ohms, 1/6W [CD-MD3000H Only]
R126,127	VRD-ST2CD153J	J	AA	15 kohms, 1/6W	R345	VRD-ST2CD472J	J	AA	4.7 kohms, 1/6W
R128	VRD-ST2CD683J	J	AA	68 kohms, 1/6W	R346	VRD-CY1JB331J	J	AA	330 ohms, 1/16W [CD-MD3000H Only]
R129,130	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R347	VRD-CY1JB682J	J	AA	6.8 kohms, 1/16W [CD-MD3000H Only]
R131	VRD-ST2CD682J	J	AA	6.8 kohms, 1/6W	R348	VRD-CY1JB681J	J	AA	680 ohms, 1/16W [CD-MD3000H Only]
R132,133	VRD-ST2CD152J	J	AA	1.5 kohms, 1/6W	R349	VRD-ST2CD330J	J	AA	33 ohms, 1/6W [CD-MD3000H Only]
R134,135	VRD-ST2CD101J	J	AA	100 ohm, 1/6W	R350	VRD-CY1JB272J	J	AA	2.7 kohms, 1/16W
R136~138	VRD-ST2CD103J	J	AA	10 kohm, 1/6W	R351	VRD-ST2CD562J	J	AA	5.6 kohms, 1/6W
R139	VRD-ST2CD223J	J	AA	22 kohms, 1/6W	R352	VRD-CY1JB102J	J	AA	1 kohm, 1/16W
R141	VRD-ST2CD473J	J	AA	47 kohms, 1/6W	R353	VRD-CY1JB271J	J	AA	270 ohms, 1/16W
R143	VRD-ST2EE820J	J	AA	82 ohms, 1/4W	R354	VRD-CY1JB392J	J	AA	3.9 kohms, 1/16W
R144	VRD-ST2EE221J	J	AA	220 ohms, 1/4W	R355	VRD-CY1JB332J	J	AA	3.3 kohms, 1/16W
R147	VRD-ST2CD472J	J	AA	4.7 kohms, 1/6W	R356	VRD-CY1JB102J	J	AA	1 kohm, 1/16W
R148	VRD-ST2CD4R7J	J	AA	4.7 ohms, 1/6W	R357	VRD-CY1JB474J	J	AA	470 kohms, 1/16W
R149	VRD-ST2CD153J	J	AA	15 kohms, 1/6W	R358	VRD-CY1JB822J	J	AA	8.2 kohms, 1/16W
R150	VRD-ST2CD682J	J	AA	6.8 kohms, 1/6W	R359	VRD-CY1JB182J	J	AA	1.8 kohms, 1/16W
R153,154	VRD-ST2CD473J	J	AA	47 kohms, 1/6W	R360	VRD-ST2CD472J	J	AA	4.7 kohms, 1/6W
R155,156	VRD-ST2CD333J	J	AA	33 kohms, 1/6W	R361,362	VRD-CY1JB472J	J	AA	4.7 kohms, 1/16W [CD-MD3000H]
R200	VRD-RT2HD271J	J	AA	270 ohms, 1/2W [CD-MD3000W]	R361,362	VRD-CY1JB822J	J	AA	8.2 kohms, 1/16W [CD-MD3000W]
R200	VRD-ST2EE101J	J	AA	100 ohm, 1/4W [CD-MD3000H]	R363,364	VRD-CY1JB122J	J	AA	1.2 kohms, 1/16W
R201,202	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R369	VRD-ST2CD820J	J	AA	82 ohms, 1/6W [CD-MD3000H]
R203,204	VRD-ST2CD821J	J	AA	820 ohms, 1/6W	R369	VRD-ST2EE821J	J	AA	820 ohms, 1/4W [CD-MD3000W]
R205,206	VRD-ST2CD563J	J	AA	56 kohms, 1/6W	R370	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R207	VRD-RT2HD100J	J	AA	10 ohm, 1/2W [CD-MD3000W]	R371	VRD-CY1JB472J	J	AA	4.7 kohms, 1/16W
R207	VRD-RT2HD120J	J	AA	12 ohms, 1/2W [CD-MD3000H]	R372~374	VRD-CY1JB102J	J	AA	1 kohm, 1/16W
R208	VRD-RT2HD271J	J	AA	270 ohms, 1/2W [CD-MD3000W Only]	R376	VRD-CY1JB102J	J	AA	1 kohm, 1/16W
R209,210	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R377	VRD-CY1JB473J	J	AA	47 kohms, 1/16W
R211,212	VRD-ST2CD183J	J	AA	18 kohms, 1/6W	R378	VRD-CY1JB823J	J	AA	82 kohms, 1/16W
R213	VRD-ST2CD101J	J	AA	100 ohm, 1/6W	R379	VRD-CY1JB222J	J	AA	2.2 kohms, 1/16W
R214	VRD-RT2HD8R2J	J	AA	8.2 ohms, 1/2W [CD-MD3000W Only]	R380	VRD-CY1JB152J	J	AA	1.5 kohms, 1/16W
R215,216	VRD-ST2CD223J	J	AA	22 kohms, 1/6W	R381	VRD-CY1JB103J	J	AA	10 kohm, 1/16W
R217,218	VRD-ST2CD183J	J	AA	18 kohms, 1/6W	R382	VRD-ST2EE151J	J	AA	150 ohms, 1/4W
R219,220	VRN-VV3DAR22J	J	AC	0.22 ohms, 2W	R383~385	VRD-CY1JB562J	J	AA	5.6 kohms, 1/16W
R221,222	VRD-ST2CD472J	J	AA	4.7 kohms, 1/6W	R389	VRD-CY1JB392J	J	AA	3.9 kohms, 1/16W
R223,224	VRN-VV3AAR10J	J	AB	0.1 ohm, 1W	R391,392	VRD-ST2EE271J	J	AA	270 ohms, 1/4W [CD-MD3000H]
R225,226	VRD-ST2CD103J	J	AA	10 kohm, 1/6W	R391,392	VRD-ST2EE391J	J	AA	390 ohms, 1/4W [CD-MD3000W]
R227,228	VRD-ST2CD822J	J	AA	8.2 kohms, 1/6W	R393	VRD-CY1JB102J	J	AA	1 kohm, 1/16W
R229,230	VRN-VV3DAR22J	J	AC	0.22 ohms, 2W	R395	VRD-CY1JB473J	J	AA	47 kohms, 1/16W

CD-MD3000H/CD-MD3000W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION	NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R399	VRD-ST2CD103J	J	AA	10 kohm, 1/6W	R910~913	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R501,502	VRD-ST2CD331J	J	AA	330 ohms, 1/6W	R914~917	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R503,504	VRS-CY1JB222J	J	AA	2.2 kohms, 1/16W	R918~921	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R507	VRS-CY1JB223J	J	AA	22 kohms, 1/16W	R927	VRS-CY1JB101J	J	AA	100 ohm, 1/16W
R511,512	VRS-CY1JB822J	J	AA	8.2 kohms, 1/16W	R928	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R513,514	VRS-CY1JB122J	J	AA	1.2 kohms, 1/16W	R932,933	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R515,516	VRS-CY1JB473J	J	AA	47 kohms, 1/16W	R934	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R517	VRS-CY1JB102J	J	AA	1 kohm, 1/16W	R935,936	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R522,523	VRD-ST2EE331J	J	AA	330 ohms, 1/4W	R941	VRS-CY1JB334J	J	AA	330 kohms, 1/16W
R524~526	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R943,944	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R527,528	VRS-CY1JB222J	J	AA	2.2 kohms, 1/16W	R945	VRS-CY1JB101J	J	AA	100 ohm, 1/16W
R529~534	VRS-CY1JB392J	J	AA	3.9 kohms, 1/16W	R946~948	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R535,536	VRS-CY1JB473J	J	AA	47 kohms, 1/16W	R949	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R537,538	VRS-CY1JB102J	J	AA	1 kohm, 1/16W	R953,954	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R539,540	VRS-CY1JB103J	J	AA	10 kohm, 1/16W	R955~959	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R541,542	VRS-CY1JB152J	J	AA	1.5 kohms, 1/16W	R960	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R543,544	VRS-CY1JB473J	J	AA	47 kohms, 1/16W	R962	VRS-CY1JB182J	J	AA	1.8 kohms, 1/16W
R547,548	VRS-CY1JB222J	J	AA	2.2 kohms, 1/16W	R963	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R549,550	VRS-CY1JB393J	J	AA	39 kohms, 1/16W	R965,966	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R551,552	VRS-CY1JB473J	J	AA	47 kohms, 1/16W	R967	VRS-CY1JB182J	J	AA	1.8 kohms, 1/16W
R582	VRS-CY1JB223J	J	AA	22 kohms, 1/16W	R968~970	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R591,592	VRS-CY1JB473J	J	AA	47 kohms, 1/16W	R971	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R701~706	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R972	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R707,708	VRD-ST2CD272J	J	AA	2.7 kohms, 1/6W	R974	VRS-CY1JB221J	J	AA	220 ohms, 1/16W
R710,711	VRD-ST2CD471J	J	AA	4.7 kohms, 1/6W	R976~981	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R712	VRD-ST2CD222J	J	AA	2.2 kohms, 1/6W	R982	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R713~715	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R984~988	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R720,721	VRD-ST2CD682J	J	AA	6.8 kohms, 1/6W	R989	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R723	VRD-ST2CD182J	J	AA	1.8 kohms, 1/6W	R990	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R726	VRD-ST2CD222J	J	AA	2.2 kohms, 1/6W	R991	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R728,729	VRD-ST2CD153J	J	AA	15 kohms, 1/6W	R992~994	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R730,731	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R995	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R733	VRD-ST2CD182J	J	AA	1.8 kohms, 1/6W	R996~998	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R735,736	VRD-ST2CD333J	J	AA	33 kohms, 1/6W	R999	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R747	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R1001	VRS-CY1JB473J	J	AA	47 kohms, 1/16W
R748	VRD-ST2CD103J	J	AA	10 kohm, 1/6W	R1002	VRS-CY1JB104J	J	AA	100 kohm, 1/16W
R749	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R1003	VRD-ST2CD472J	J	AA	4.7 kohms, 1/6W
R750	VRD-ST2CD101J	J	AA	100 ohm, 1/6W	R1007	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R752~754	VRD-ST2CD122J	J	AA	1.2 kohms, 1/6W	R1008	VRD-ST2CD102J	J	AA	1 kohm, 1/6W
R755~757	VRD-ST2CD152J	J	AA	1.5 kohms, 1/6W	R1011	VRS-CY1JB104J	J	AA	100 kohm, 1/16W
R758~760	VRD-ST2CD182J	J	AA	1.8 kohms, 1/6W	R1012	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R761	VRD-ST2CD331J	J	AA	330 ohms, 1/6W	R1013	VRD-ST2CD473J	J	AA	47 kohms, 1/6W
R762	VRS-CY1JB682J	J	AA	6.8 kohms, 1/16W	R1014	VRS-CY1JB104J	J	AA	100 kohm, 1/16W
R763	VRS-CY1JB272J	J	AA	2.7 kohms, 1/16W	R1015	VRS-CY1JB821J	J	AA	820 ohms, 1/16W
R764~766	VRD-ST2CD222J	J	AA	2.2 kohms, 1/6W	R1016,1017	VRS-CY1JB103J	J	AA	10 kohm, 1/16W
R767	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R1022	VRS-CY1JB473J	J	AA	47 kohms, 1/16W
R768	VRD-RT2HD2R2J	J	AA	2.2 ohms, 1/2W [CD-MD3000H Only]	R1023	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R769~771	VRD-ST2CD392J	J	AA	3.9 kohms, 1/6W	R1024	VRS-CY1JB103J	J	AA	10 kohm, 1/16W
R772	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R1026,1027	VRS-CY1JB103J	J	AA	10 kohm, 1/16W
R773~775	VRD-ST2CD472J	J	AA	4.7 kohms, 1/6W	R1028	VRS-CY1JB273J	J	AA	27 kohms, 1/16W
R776	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R1031,1032	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R777~779	VRD-ST2CD822J	J	AA	8.2 kohms, 1/6W	R1033	VRS-CY1JB103J	J	AA	10 kohm, 1/16W [CD-MD3000H Only]
R780	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R1035,1036	VRS-CY1JB562J	J	AA	5.6 kohms, 1/16W
R781~783	VRD-ST2CD183J	J	AA	18 kohms, 1/6W	R1039	VRS-CY1JB474J	J	AA	470 kohms, 1/16W
R785	VRD-ST2CD473J	J	AA	47 kohms, 1/6W	R1040,1041	VRS-CY1JB103J	J	AA	10 kohm, 1/16W
R787	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R1042	VRS-CY1JB474J	J	AA	470 kohms, 1/16W
R788	VRD-ST2CD331J	J	AA	330 ohms, 1/6W	R1043	VRS-CY1JB103J	J	AA	10 kohm, 1/16W
R789	VRD-ST2EE151J	J	AA	150 ohms, 1/4W	R1044	VRS-CY1JB223J	J	AA	22 kohms, 1/16W
R790	VRD-ST2EE331J	J	AA	330 ohms, 1/4W	R1046	VRS-CY1JB123J	J	AA	12 kohms, 1/16W
R791,792	VRD-ST2CD272J	J	AA	2.7 kohms, 1/6W	R1048	VRS-CY1JB103J	J	AA	10 kohm, 1/16W
R800	VRD-ST2CD223J	J	AA	22 kohms, 1/6W [CD-MD3000W Only]	R1050~1052	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R802	VRD-ST2CD622J	J	AA	6.2 kohms, 1/6W	R1053~1057	VRS-CY1JB103J	J	AA	10 kohm, 1/16W
R803	VRD-ST2CD223J	J	AA	22 kohms, 1/6W	R1058	VRS-CY1JB104J	J	AA	100 kohm, 1/16W
R804	VRD-ST2CD472J	J	AA	4.7 kohms, 1/6W	R1060	VRS-CY1JB104J	J	AA	100 kohm, 1/16W
R806,807	VRD-ST2CD223J	J	AA	22 kohms, 1/6W	R1062	VRS-CY1JB332J	J	AA	3.3 kohms, 1/16W
R808	VRD-ST2CD221J	J	AA	220 ohms, 1/6W	R1065,1066	VRS-CY1JB103J	J	AA	10 kohm, 1/16W
R809	VRD-ST2CD223J	J	AA	22 kohms, 1/6W	R1067	RCILC0353AFZZ	J	AB	Tip Solid Induction, 100mA
R813	VRD-ST2CD152J	J	AA	1.5 kohms, 1/6W	R1068,1069	VRD-ST2CD103J	J	AA	10 kohm, 1/6W
R814	VRD-ST2CD101J	J	AA	100 ohm, 1/6W	R1074	VRD-ST2CD332J	J	AA	3.3 kohms, 1/6W
R815	VRD-ST2CD473J	J	AA	47 kohms, 1/6W	R1075	VRS-CY1JB332J	J	AA	3.3 kohms, 1/16W
R820,821	VRD-ST2CD471J	J	AA	470 ohms, 1/6W	R1077,1078	VRD-ST2CD121J	J	AA	120 ohms, 1/6W
R822	VRD-ST2CD152J	J	AA	1.5 kohms, 1/6W	R1079,1080	VRS-CY1JB102J	J	AA	1 kohm, 1/16W
R828,829	VRD-ST2CD223J	J	AA	22 kohms, 1/6W	R1083	RCILC0353AFZZ	J	AB	Tip Solid Induction, 100mA
R830	VRD-ST2CD101J	J	AA	100 ohm, 1/6W	R1084~1090	VRS-CY1JB562J	J	AA	5.6 kohms, 1/16W
R834,835	VRD-RT2HD560J	J	AA	56 ohms, 1/2W	R1092~1094	VRS-CY1JB562J	J	AA	5.6 kohms, 1/16W
R836	VRD-ST2EE271J	J	AA	270 ohms, 1/4W	R1095	VRS-CY1JB103J	J	AA	10 kohm, 1/16W
R900	VRS-CY1JB272J	J	AA	2.7 kohms, 1/16W	R1096	VRD-ST2CD103J	J	AA	10 kohm, 1/6W
R901~903	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R1097,1098	VRS-CY1JB122J	J	AA	1.2 kohms, 1/16W
R904	VRS-CY1JB102J	J	AA	1 kohm, 1/16W	R1099	VRD-ST2CD473J	J	AA	47 kohms, 1/6W
R905,906	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R1100	VRS-TQ2BB270J	J	AA	27 ohms, 1/8W
R907	VRS-CY1JB102J	J	AA	1 kohm, 1/16W	R1101	VRS-CY1JB1R0J	J	AA	1 ohm, 1/16W
R908	VRD-ST2CD102J	J	AA	1 kohm, 1/6W	R1102	VRS-CY1JB103J	J	AA	10 kohm, 1/16W

CD-MD3000H/CD-MD3000W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R1105	VR5-CY1JB122J	J	AA	1.2 kohms,1/16W
R1105A	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R1106~1109	VR5-CY1JB103J	J	AA	10 kohm,1/16W
R1110	VR5-CY1JB564F	J	AA	560 kohms,1/16W
R1111,1112	VR5-CY1JB823F	J	AA	82 kohms,1/16W
R1113	VR5-CY1JB564F	J	AA	560 kohms,1/16W
R1114	VR5-CY1JB123J	J	AA	12 kohms,1/16W
R1115	VR5-CY1JB334F	J	AA	330 kohms,1/16W
R1116,1117	VR5-CY1JB473F	J	AA	47 kohms,1/16W
R1118	VR5-CY1JB334F	J	AA	330 kohms,1/16W
R1118A,1119A	VR5-CY1JB102J	J	AA	1 kohm,1/16W
R1119	VR5-CY1JB224J	J	AA	220 kohms,1/16W
R1120	VR5-CY1JB274J	J	AA	270 kohms,1/16W
R1120A	VR5-CY1JB152J	J	AA	1.5 kohms,1/16W
R1121	VR5-CY1JB393J	J	AA	39 kohms,1/16W
R1122	VR5-CY1JB123J	J	AA	12 kohms,1/16W
R1122A	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R1123	VR5-CY1JB123J	J	AA	12 kohms,1/16W
R1124	VR5-CY1JB222J	J	AA	2.2 kohms,1/16W
R1124A	VR5-CY1JB103J	J	AA	10 kohm,1/16W
R1125	VR5-CY1JB222J	J	AA	2.2 kohms,1/16W
R1133	VRD-ST2CD471J	J	AA	470 ohms,1/6W
R1141	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R1145	VR5-CY1JB183J	J	AA	18 kohms,1/16W
R1200,1201	VR5-CY1JB104F	J	AA	100 kohm,1/16W
R1202,1203	VR5-CY1JB124F	J	AA	120 kohms,1/16W
R1204,1205	VR5-CY1JB823J	J	AA	82 kohms,1/16W
R1206,1207	VR5-CY1JB623J	J	AA	62 kohms,1/16W
R1208	VR5-CY1JB221J	J	AA	220 ohms,1/16W
R1209	VR5-CY1JB101J	J	AA	100 ohm,1/16W
R1210,1211	VR5-CY1JB221J	J	AA	220 ohms,1/16W
R1212	VR5-CY1JB470J	J	AA	47 ohms,1/16W
R1214	VR5-CY1JB103J	J	AA	10 kohm,1/16W
R1215	VR5-CY1JB105J	J	AA	1 Mohm,1/16W
R1217	VR5-CY1JB151J	J	AA	150 ohms,1/16W
R1219	VR5-CY1JB473J	J	AA	47 kohms,1/16W
R1221,1222	VR5-CY1JB473J	J	AA	47 kohms,1/16W
R1230,1231	VR5-CY1JB103F	J	AA	10 kohm,1/16W
R1232	VR5-CY1JB123J	J	AA	12 kohms,1/16W
R1261~1266	VR5-CY1JB223J	J	AA	22 kohms,1/16W
R1300	VR5-TV2AB8R2J	J	AA	8.2 ohms,1/10W
R1301	VR5-CY1JB100J	J	AA	10 ohm,1/16W
R1304	VR5-TV2AB151J	J	AA	150 ohms,1/10W
R1401	VR5-CY1JB272J	J	AA	2.7 kohms,1/16W
R1403	VR5-CY1JB471J	J	AA	470 ohms,1/16W
R1405	VR5-CY1JB104J	J	AA	100 kohm,1/16W
R1406	VR5-CY1JB103J	J	AA	10 kohm,1/16W
R1407,1408	VR5-CY1JB332J	J	AA	3.3 kohms,1/16W
R1414	VR5-CY1JB224J	J	AA	220 kohms,1/16W
R1415	VR5-CY1JB102J	J	AA	1 kohm,1/16W
R1417,1418	VR5-CY1JB102J	J	AA	1 kohm,1/16W
R1420	VR5-CY1JB102J	J	AA	1 kohm,1/16W
R1424	VR5-CY1JB473J	J	AA	47 kohms,1/16W
R1430	VR5-CY1JB103J	J	AA	10 kohm,1/16W
R1435	VR5-CY1JB103J	J	AA	10 kohm,1/16W
R1440	VR5-CY1JB101J	J	AA	100 ohm,1/16W
R1441	VR5-CY1JB473J	J	AA	47 kohms,1/16W
R1443	VR5-CY1JB102J	J	AA	1 kohm,1/16W
R1444	VR5-CY1JB103J	J	AA	10 kohm,1/16W
R1460,1461	VR5-CY1JB103J	J	AA	10 kohm,1/16W
R1463	VR5-CY1JB103J	J	AA	10 kohm,1/16W
R1510	VR5-CY1JB102J	J	AA	1 kohm,1/16W
R1511	VR5-CY1JB562J	J	AA	5.6 kohms,1/16W
R1513	VR5-CY1JB562J	J	AA	5.6 kohms,1/16W
R1515,1516	VR5-CY1JB182J	J	AA	1.8 kohms,1/16W
R1517,1518	VR5-CY1JB470J	J	AA	47 ohms,1/16W
R1520	VR5-CY1JB473J	J	AA	47 kohms,1/16W
R1521	VR5-CY1JB121J	J	AA	120 ohms,1/16W
R1523	VR5-CY1JB473J	J	AA	47 kohms,1/16W
R1526	VR5-CY1JB682J	J	AA	6.8 kohms,1/16W
R1527	VR5-CY1JB473J	J	AA	47 kohms,1/16W
R1529	VR5-CY1JB221J	J	AA	220 ohms,1/16W
R1532	VR5-CY1JB332J	J	AA	3.3 kohms,1/16W
R1533~1536	VR5-CY1JB102J	J	AA	1 kohm,1/16W
R1537,1538	VR5-CY1JB221J	J	AA	220 ohms,1/16W
R1539	VR5-CY1JB121J	J	AA	120 ohms,1/16W
R1600,1601	VR5-CY1JB682F	J	AA	6.8 kohms,1/16W
R1605,1606	VR5-CY1JB103F	J	AA	10 kohm,1/16W
R1612	VR5-CY1JB154F	J	AA	150 kohms,1/16W
R1614	VR5-CY1JB104F	J	AA	100 kohm,1/16W
R1616,1617	VR5-CY1JB103J	J	AA	10 kohm,1/16W
R1618	VR5-CY1JB153J	J	AA	15 kohms,1/16W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R1620	VR5-CY1JB153J	J	AA	15 kohms,1/16W
R1621	VR5-CY1JB682J	J	AA	6.8 kohms,1/16W
R1622,1623	VR5-CY1JB223J	J	AA	22 kohms,1/16W
R1624	VR5-CY1JB682J	J	AA	6.8 kohms,1/16W
R1701	VR5-CY1JB393J	J	AA	39 kohms,1/16W
R1702	VR5-CY1JB303J	J	AA	30 kohms,1/16W
R1703	VR5-CY1JB102F	J	AA	1 kohm,1/16W
R1704	VR5-CY1JB332F	J	AA	3.3 kohms,1/16W
R1705	VR5-CY1JB821J	J	AA	820 ohms,1/16W
R1708	VR5-CY1JB102J	J	AA	1 kohm,1/16W
R1711	VR5-TV2AB120J	J	AA	12 ohms,1/10W
R1712	VR5-CY1JB273J	J	AA	27 kohms,1/16W
R1714	VR5-TV2AB120J	J	AA	12 ohms,1/10W
R1716	VR5-CY1JB104J	J	AA	100 kohm,1/16W
R1801	VR5-CY1JB271J	J	AA	270 ohms,1/16W
R1802	VR5-CY1JB563F	J	AA	56 kohms,1/16W
R1803	VR5-CY1JB333F	J	AA	33 kohms,1/16W
R1804	VR5-CY1JB391J	J	AA	390 ohms,1/16W
R1805	VR5-CY1JB271J	J	AA	270 ohms,1/16W
R1806	VR5-TQ2BB1R0J	J	AA	1 ohm,1/8W
R1807	VR5-CY1JB273J	J	AA	27 kohms,1/16W
R1808	VR5-CY1JB182J	J	AA	1.8 kohms,1/16W
R1809	VR5-TQ2BB1R0J	J	AA	1 ohm,1/8W
R1811	VR5-TQ2BB1R0J	J	AA	1 ohm,1/8W
R1930	VR5-TV2AB391J	J	AA	390 ohms,1/10W
R1931	VR5-TV2AB561J	J	AA	560 ohms,1/10W
R1932	VR5-TV2AB121J	J	AA	120 ohms,1/10W
R1933	VR5-TV2AB271J	J	AA	270 ohms,1/10W
RA710,711	VRD-ST2CD151J	J	AA	150 ohms,1/6W
RP801	RH-QX0011AWZZ	J	AG	Posistor,0.23 ohms
RP803	RH-QX0002AWZZ	J	AK	Posistor,0.7 ohms
RP805	RH-QX0003AWZZ	J	AK	Posistor,2.2 ohms
RP807	RH-QX0002AWZZ	J	AK	Posistor,0.7 ohms
RT26	VR5-CY1JB102J	J	AA	1 kohm,1/16W [CD-MD3000H Only]
RT28~30	VR5-CY1JB102J	J	AA	1 kohm,1/16W [CD-MD3000H Only]
RT32	VR5-CY1JB103J	J	AA	10 kohm,1/16W [CD-MD3000H Only]
RT33,34	VR5-CY1JB563J	J	AA	56 kohms,1/16W [CD-MD3000H Only]
RT35~37	VR5-CY1JB224J	J	AA	220 kohms,1/16W [CD-MD3000H Only]
RT39	VR5-CY1JB224J	J	AA	220 kohms,1/16W [CD-MD3000H Only]

OTHER CIRCUITRY PARTS

BI11/CNS11A/B	QCNWN1660AWZZ	J	AL	Connector Ass'y,6/4/2Pin
BI201A/B	QCNWN1658AWZZ	J	AF	Connector Ass'y,8/8Pin
BI702/CNS702	QCNWN1823AWZZ	J		Connector Ass'y,6/6Pin
BI705A/B	QCNWN1674AWZZ	J	AD	Connector Ass'y,2/2Pin
BI720/CNS720	QCNWN1665AWZZ	J	AH	Connector Ass'y,11/11Pin
BI722A/B	QCNWN1685AWZZ	J	AD	Connector Ass'y,2/2Pin
BI730/CNS730	QCNWN1675AWZZ	J	AE	Connector Ass'y,4/4Pin
BI740A/B	QCNWN1673AWZZ	J	AE	Connector Ass'y,3/3Pin
BI741/CNS741	QCNWN1666AWZZ	J	AG	Connector Ass'y,5/5Pin
BI770/CNS770	QCNWN1667AWZZ	J	AG	Connector Ass'y,7/7Pin
BI771A/B	QCNWN1684AWZZ	J	AE	Connector Ass'y,4/4Pin
BI772/CNS772	QCNWN1683AWZZ	J	AG	Connector Ass'y,6/6Pin
BI773/CNS773	QCNWN1682AWZZ	J	AD	Connector Ass'y,2/2Pin
BI804/CNS804	QCNWN1657AWZZ	J	AF	Connector Ass'y,8/8Pin
BI808/CNS808	QCNWN1655AWZZ	J	AE	Connector Ass'y,5/5Pin
BI922A/B	QCNWN1719AWZZ	J		Connector Ass'y,3/3Pin
BI940/CNS940	QCNWN1661AWZZ	J	AF	Connector Ass'y,8/8Pin
BI950	QCNCW010NAWZZ	J	AC	Socket,13Pin
BI960	QCNCW010QAWZZ	J	AE	Socket,15Pin
CN1101	QCNCWYK28AFZZ	J	AH	Socket,28Pin
CN1300	QCNCM970BAFZZ	J	AD	Plug,2Pin
CN1401	QCNCWX05AFZZ	J	AC	Socket,5Pin
CN1402	QCNCWX06AFZZ	J	AD	Socket,6Pin
CN1501	QCNCWYR28AWZZ	J	AF	Socket,28Pin
CN1502	QCNCM970DAFZZ	J	AE	Socket,4Pin
CN1931	QCNCWX05AFZZ	J	AC	Socket,5Pin
CN1932	QCNCWX06AFZZ	J	AD	Socket,6Pin
CNP1	QCNCWZF33AWZZ	J	AF	Socket,33Pin
CNP2	QCNCW026HAWZZ	J	AC	Socket,8Pin
CNP3	QCNCW026DAWZZ	J	AC	Socket,4Pin
CNP4	92LCONE4P53254	J	AC	Plug,4Pin
CNP5	QCNCM704HAWZZ	J	AC	Plug,8Pin
CNP6	92LCONE6P53253	J	AC	Plug,6Pin
CNP6A	92LCONE6P53254	J	AC	Plug,6Pin
CNP7	QCNCM704GAWZZ	J	AC	Plug,7Pin
CNP101	QCNCM704GAFZZ	J	AC	Plug,7Pin
CNP102	QCNCM704HAFZZ	J	AC	Plug,8Pin
CNP203	92LCONE5P5268	J	AD	Plug,5Pin
CNP204	92LCONE2P53254	J	AB	Plug,2Pin
CNP205	92LCONE2P53254	J	AB	Plug,2Pin [CD-MD3000W Only]

CD-MD3000H/CD-MD3000W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION	NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
CNP207	92LCONE4P53254	J	AC	Plug,4Pin	SW725	92LSWICH1401AT	J	AC	Switch,Key Type [CD6 Eject]
CNP301	92LCONE2P5268	J	AB	Plug,2Pin [CD-MD3000H Only]	SW730	92LSWICH1401AT	J	AC	Switch,Key Type [CD1 Play]
CNP303	92LCONE3P5268	J	AC	Plug,3Pin [CD-MD3000W Only]	SW731	92LSWICH1401AT	J	AC	Switch,Key Type [CD2 Play]
CNP701	QCNCWZG05AWZZ	J	AB	Socket,5Pin	SW732	92LSWICH1401AT	J	AC	Switch,Key Type [CD3 Play]
CNP721	92LCONE6P53254	J	AC	Plug,6Pin	SW733	92LSWICH1401AT	J	AC	Switch,Key Type [CD4 Play]
CNP775	92LCONE2P53253	J	AB	Plug,2Pin	SW734	92LSWICH1401AT	J	AC	Switch,Key Type [CD5 Play]
CNP801	QCNCM049BAWZZ	J	AC	Plug,2Pin [CD-MD3000H]	SW735	92LSWICH1401AT	J	AC	Switch,Key Type [CD6 Play]
CNP801	QCNCM049EAWZZ	J	AD	Plug,5Pin [CD-MD3000W]	SW750	92LSWICH1401AT	J	AC	Switch,Key Type [High/Normal]
CNP802	QCNCM051EAWZZ	J	AD	Plug,5Pin	SW751	92LSWICH1401AT	J	AC	Switch,Key Type [Record/Mode]
CNP803	QCNCM035EAWZZ	J		Plug,5Pin	SW752	92LSWICH1401AT	J	AC	Switch,Key Type [Auto Marker]
CNP805	92LCONE8P5268	J		Plug,8Pin	SW753	92LSWICH1401AT	J	AC	Switch,Key Type [Fast Reverse]
CNP806	QCNCM010QAWZZ	J	AD	Plug,15Pin	SW754	92LSWICH1401AT	J	AC	Switch,Key Type [Fast Forward]
CNP807	QCNCM010NAWZZ	J	AC	Plug,13Pin	SW755	92LSWICH1401AT	J	AC	Switch,Key Type [Tape Record]
CNP901	QCNCWZF33AWZZ	J	AF	Socket,33Pin	SW756	92LSWICH1401AT	J	AC	Switch,Key Type [Play/Pause]
CNP920	QCNCWYW28AWZZJ		AK	Socket,28Pin	SW757	92LSWICH1401AT	J	AC	Switch,Key Type [Stop]
CNP921	92LCONPB4BPHK	J	AC	Plug,4Pin	SW758	92LSWICH1401AT	J	AC	Switch,Key Type [Play]
CNP925	92LCONE4P53253	J	AB	Plug,4Pin	SW760	92LSWICH1401AT	J	AC	Switch,Key Type [AUX]
CNP931	92LCONPB11BPHK	J	AC	Plug,11Pin	SW761	92LSWICH1401AT	J	AC	Switch,Key Type [Tape]
CNP933	92LCONE5P53253	J	AB	Plug,5Pin	SW762	92LSWICH1401AT	J	AC	Switch,Key Type [Tuner]
CNP934	92LCONE7P53253	J	AC	Plug,7Pin	SW763	92LSWICH1401AT	J	AC	Switch,Key Type [CD]
CNP935	92LCONPB6BPHK	J	AB	Plug,6Pin	SW764	92LSWICH1401AT	J	AC	Switch,Key Type [MD]
CNP970	QCNCWZG12AWZZ	J	AC	Socket,12Pin	SW767	92LSWICH1401AT	J	AC	Switch,Key Type [Track Edit]
CNP975	92LCONPB2BPHK	J	AB	Plug,2Pin	SW772	92LSWICH1401AT	J	AC	Switch,Key Type [Equalizer Mode]
CNS4	QCNCWN1692AWZZ	J	AD	Connector Ass'y,4Pin	SW773	92LSWICH1401AT	J	AC	Switch,Key Type [X-BASS]
CNS5A/B	QCNCWN1690AWZZ	J	AG	Connector Ass'y,8/8Pin	SW774	92LSWICH1401AT	J	AC	Switch,Key Type [Display Character]
CNS6A/B	QCNCWN1668AWZZ	J	AF	Connector Ass'y,6/6Pin	SW775	92LSWICH1401AT	J	AC	Switch,Key Type [Menu]
CNS7A/B	QCNCWN1689AWZZ	J	AF	Connector Ass'y,7/7Pin	SW776	92LSWICH1401AT	J	AC	Switch,Key Type [Name TOC Edit]
CNS200	QCNCWN1659AWZZ	J	AC	Connector Ass'y,2Pin	SW777	92LSWICH1401AT	J	AC	Switch,Key Type [Delete]
CNS205	QCNCWN1861AWZZ	J		Connector Ass'y,2Pin [CD-MD3000W Only]	SW778	92LSWICH1401AT	J	AC	Switch,Key Type [Enter]
					SW780	92LSWICH1401AT	J	AC	Switch,Key Type [MD Eject]
COR801	RCORF0015AWZZ	J	AB	Core	SW781	92LSWICH1401AT	J	AC	Switch,Key Type [CD/MD]
CORE1	RCORF0015AWZZ	J	AB	Core	SW782	92LSWICH1401AT	J	AC	Switch,Key Type MD [Record]
CORE2	RCORF0015AWZZ	J	AB	Core	SW783	92LSWICH1401AT	J	AC	Switch,Key Type [Play Mode]
CW1501	QCNCWN6770AFM1	J	AR	Flat Cable,28Pin	SW901	QSW-S0024AWZZ	J	AE	Switch,Slide Type [Span Selector] [CD-MD3000W Only]
CW1502A/B	QCNCWN1515AWZZ	J	AK	Connector Ass'y,4/4Pin					
CW1931	QCNCWN1512AWZZ	J	AC	Flat Cable,5Pin	SW1930	QSW-P0011AWZZ	J	AD	Switch,Push Type [Write Pro]
CW1932	QCNCWN1513AWZZ	J	AC	Flat Cable,6Pin	SW1931	QSW-P0012AWZZ	J	AD	Switch,Push Type [X-BASS]
△ F801	92LFUSET202E	J	AC	Fuse,T2A L 250V	SW1932	QSW-M0007AWZZ	J	AD	Switch,Push Type [Loading]
△ F802	92LFUSET252E	J	AD	Fuse,T2.5A L 250V	SW1933	QSW-M0007AWZZ	J	AD	Switch,Push Type [Record]
△ F803,804	92LFUSET502E	J	AC	Fuse,T5A L 250V	SW1934	QSW-M0007AWZZ	J	AD	Switch,Push Type [Play]
△ F805,806	92LFUSET402E	J	AD	Fuse,T3.15A L 250V	SW1936	QSW-M0157AFZZ	J	AD	Switch,Slide Type [Lead In]
△ F807	92LFUSET312E	J	AD	Fuse,T3.15A L 250V [CD-MD3000H Only]	SWB101	QSW-P9005AWZZ	J	AD	Switch,Push Type[Disc Detect 1]
					SWB102	QSW-P9005AWZZ	J	AD	Switch,Push Type[Disc Detect 2]
△ F808	92LFUSET202E	J	AC	Fuse,T2A L 250V	SWB103	QSW-P9005AWZZ	J	AD	Switch,Push Type[Disc Detect 3]
FE301	RTUNS0016AWZZ	J	AX	FM Front End [CD-MD3000H Only]	SWB104	QSW-P9003AWZZ	J	AD	Switch,Push Type [Mode 1]
FFC901	QCNCWN1672AWZZ	J	AF	Flat Cable,33Pin	SWB105	QSW-P9003AWZZ	J	AD	Switch,Push Type [Mode 2]
FFC970	QCNCWN1686AWZZ	J	AE	Flat Cable,12Pin	SWB106	QSW-P9003AWZZ	J	AD	Switch,Push Type [Mode 3]
FW2	QCNCWN1691AWZZ	J	AD	Flat Wire,8Pin	SWB107	QSW-P9003AWZZ	J	AD	Switch,Push Type [Mode 4]
FW3	QCNCWN1693AWZZ	J	AC	Flat Wire,4Pin	SWB108	QSW-P9003AWZZ	J	AD	Switch,Push Type [Mode 5]
JK501	92LJACK1776A	J	AF	Jack,AUX	SWB109	QSW-P9004AWZZ	J	AE	Switch,Push Type [Tray 1]
JK701	QJAKM0010AWZZ	J	AF	Jack,Headphones	SWB110	QSW-P9004AWZZ	J	AE	Switch,Push Type [Tray 2]
JOG701	QSW-Z0011AWZZ	J	AG	Switch,Push Type [Jog Dial]	UNA901	VHPGP1F32R/-1	J	AP	Terminal,Digital Input
LCD720	RUNTZ0020AWZZ	J	BC	LCD Display					
M901	RMOTV0025AWZZ	J	AV	MD Spindle Motor Ass'y					
M902	92LMTR3167BASY	J	AP	MD Sled Motor Ass'y					
M903	92LMTR3167AASY	J	AN	MD Loading Motor Ass'y					
MO200	RMOTV0027AWZZ	J	AM	Motor,Air Cooling Fan					
MO201	RMOTV0027AWZZ	J	AM	Motor,Air Cooling Fan [CD-MD3000W Only]					
MO700	RMOTV0027AWZZ	J	AM	Motor,Control Panel					
MOB1	92LMTR3435DASY	J	AM	Main Cam Motor Ass'y					
MOB2	92LMTR3435DASY	J	AM	Tray Motor Ass'y					
NM1	92LMTR2996CASY	J	AS	Motor with Chassis [Spindle]					
NM2	92LMTR1854BASY	J	AP	Motor with Gear [Sled]					
NSW1	QSW-F9001AW01	J	AD	Switch,Push Type [Pickup In]					
RX701	VHLN64H380A-1	J	AK	Remote Sensor,N64H380A					
△ RY201,202	RRLYD0004AWZZ	J	AP	Relay					
△ RY801	RRLYD0001SJZZ	J	AQ	Relay					
SO201	QTANA0806AWZZ	J	AG	Terminal,Speaker					
SO301	QTANC0103AWZZ	J	AD	Antenna Terminal [CD-MD3000H Only]					
△ SO801	QSOCE0008AWZZ	J	AH	Switch,Slide Type [Voltage Selector] [CD-MD3000W Only]					
SW701	92LSWICH1401AT	J	AC	Switch,Key Type [Power]					
SW705	QSW-B0002AWZZ	J	AF	Switch,Lever Type [Open/Close]					
SW710	92LSWICH1401AT	J	AC	Switch,Key Type [Panel Open/Close]					
SW711	92LSWICH1401AT	J	AC	Switch,Key Type [Volume Down]					
SW712	92LSWICH1401AT	J	AC	Switch,Key Type [Volume Up]					
SW720	92LSWICH1401AT	J	AC	Switch,Key Type [CD1 Eject]					
SW721	92LSWICH1401AT	J	AC	Switch,Key Type [CD2 Eject]					
SW722	92LSWICH1401AT	J	AC	Switch,Key Type [CD3 Eject]					
SW723	92LSWICH1401AT	J	AC	Switch,Key Type [CD4 Eject]					
SW724	92LSWICH1401AT	J	AC	Switch,Key Type [CD5 Eject]					

MD MECHANISM PARTS				
2	LCHSM0089AWZZ	J	AH	Drive Chassis (A)
3	LCHSM0090AWZZ	J	AH	Drive Chassis (B)
4	LHLDX3007AWM1	J	AH	Cartridge Holder Ass'y
5	MLEVF0015AWM1	J	AK	Slider Lever Ass'y
7	MLEVF0046AWFW	J	AE	Arm,Holder
8	MLEVF0047AWFW	J	AC	Plate,Switch
9	MLEVF0048AWFW	J	AC	Arm,H/A Shift
10	MLEVP0095AWZZ	J	AC	Lever,Cam Plate
12	MSPRD0132AWFJ	J	AB	Spring,Loading
14	MSPRP0030AWFJ	J	AB	Spring,Grip
15	MSPRP0031AWFJ	J	AC	Spring,Shaft
16	MSPR0031AWFJ	J	AC	Spring,Loading Arm
17	MSPR0032AWFJ	J	AB	Spring,Shift Arm
18	NGERH0085AWZZ	J	AC	Gear,Loading (A)
19	NGERH0086AWZZ	J	AB	Gear,Middle (A)
20	NGERH0087AWZZ	J	AB	Gear,Middle (B)
21	NGERH0088AWZZ	J	AC	Gear,Middle (C)
22	NGERH0089AWZZ	J	AC	Gear,Middle (D)
24	NGERR0004AWZZ	J	AC	Rack,Grip
27	NSFTD0006AWM1	J	AG	Drive Shaft Ass'y
28	NSFTM0019AWFW	J	AC	Shaft,Pickup Slide
30	PCOVS3029AWFW	J	AG	Cover,Shield,Top
31	PCOVS3033AWFW	J	AF	Cover,Shield,Side
32	PCOVS3031AWFW	J	AG	Cover,Shield,Bottom
33	PCUSG0045AWZZ	J	AC	Cushion,Shield Cover
34	RCILH0113AFZZ	J	AS	Magnetic Head
△ 35	RCRTH8198AFZZ	J	BM	MD Pickup Unit Ass'v

CD-MD3000H/CD-MD3000W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
36	MSPRT0034AWFJ	J	AB	Spring,Ground
501	LX-BZ0040AWZZ	J	AB	Screw,ø1.4×1.5mm
502	LX-BZ0046AWZZ	J	AB	Screw,ø2×2mm
503	LX-BZ0800AFZZ	J	AA	Screw,ø1.4×2.5mm
504	LX-BZ0883AFZZ	J	AB	Screw,ø1.7×5mm
505	LX-JZ0020AWZZ	J	AB	Screw,ø1.4×3mm
506	LX-JZ0022AWZZ	J	AB	Screw,ø1.7×6mm
507	LX-JZ0024AWZZ	J	AB	Screw,ø1.4×4.5mm
509	XBPSD20P03K00	J	AB	Screw,ø2×3mm
510	XSPSN17P03K00	J	AB	Screw,ø1.7×3mm
511	XWSSD14-05000	J	AA	Washer,ø1.4×0.5mm
512	LX-BZ0846AFZZ	J	AB	Screw,ø1.7×3mm
513	LX-JZ0025AWZZ	J	AB	Screw,ø1.4×5mm
M901	RMOTV0025AWZZ	J	AV	MD Spindle Motor Ass'y
M902	92LMTR3167BASY	J	AP	MD Sled Motor Ass'y
M903	92LMTR3167AASY	J	AN	MD Loading Motor Ass'y
SW1930	QSW-P0011AWZZ	J	AD	Switch,Push Type [Write Pro]
SW1931	QSW-P0012AWZZ	J	AD	Switch,Push Type [Disc Media]
SW1932	QSW-M0007AWZZ	J	AD	Switch,Push Type [Loading]
SW1933	QSW-M0007AWZZ	J	AD	Switch,Push Type [Record]
SW1934	QSW-M0007AWZZ	J	AD	Switch,Push Type [Play]
SW1936	QSW-M0157AFZZ	J	AD	Switch,Slide Type [Lead In]

CD MECHANISM PARTS

301	NGERH0011AWZZ	J	AC	Gear,Middle
302	NGERH0012AWZZ	J	AC	Gear,Drive
303	MLEVP0080AWZZ	J	AC	Rail,Guide
304	NSFTM0020AWFW	J	AD	Shaft,Guide
305	92LMCUSN1524A	J	AD	Cushion
△ 306	92LHPC1LXASY	J	BD	Pickup Unit Ass'y
306- 1	—	—	—	Pickup Unit (Not Replacement Item)
306- 2	NGERR0043AFZZ	J	AC	Gear,Rack
306- 3	MSPRC0961AFZZ	J	AA	Spring,Rack
307	PCUSG0001AWSA	J	AD	Cushion
308	PCUSG0004AWSA	J	AD	Cushion
701	XBSSD26P06000	J	AA	Screw,ø2.6×6mm
702	XHBSD20P05000	J	AA	Screw,ø2×5mm
703	XBBSD20P03000	J	AA	Screw,ø2×3mm
704	LX-WZ1070AFZZ	J	AA	Washer,ø1.5×ø3.8×0.25mm
NM1	92LMTR2996CASY	J	AS	Motor with Chassis [Spindle]
NM2	92LMTR1854BASY	J	AP	Motor with Gear [Sled]
NSW1	QSW-F9001AW01	J	AD	Switch,Push Type [Pickup In]

CHANGER MECHANISM PARTS

101	LCHSM0106AWZZ	J	AQ	Main Base
102	PGIDM0033AWZZ	J	AH	Change Box,L
103	PGIDM0034AWZZ	J	AG	Change Box,R
104	NGERH0121AWZZ	J	AC	Gear,STB B
105	PGIDM0035AWZZ	J	AH	Bracket,STB Gear
106	MLEVP0098AWZZ	J	AB	Lever,Tray Lock
107	MSPRP0040AWFW	J	AD	Spring,Tray Lock Lever
108	GCOVA1317AWZZ	J	AF	Tray 1
109	GCOVA1318AWZZ	J	AF	Tray 2
110	GCOVA1319AWZZ	J	AF	Tray 3
111	GCOVA1320AWZZ	J	AF	Tray 4
112	GCOVA1321AWZZ	J	AF	Tray 5
113	GCOVA1322AWZZ	J	AF	Tray 6
114	LPLTP0010AWZZ	J	AG	Top Plate,R
115	MCAMP0009AWZZ	J	AE	Cam,Lift
116	NSFTT0057AWFD	J	AE	Shaft,Lift Cam
117	LPLTP0009AWZZ	J	AH	Top Plate,F
118	MLEVP0099AWZZ	J	AB	Lever,Disc OB
119	NGERH0098AWZZ	J	AC	Gear,STB Drive,L/R
120	NGERH0099AWZZ	J	AC	Gear,STB Drive,L
121	MLEVF0055AWFW	J	AC	Lever,OS,L/R
122	NGERH0100AWZZ	J	AC	Gear,STB Drive,R
123	MSPRT0040AWFJ	J	AB	Spring,OS Lever
124	NGERH0111AWZZ	J	AC	Gear,Tray Drive,R
125	NGERH0113AWZZ	J	AF	Gear,Tray Joint,R
126	NGERH0116AWZZ	J	AH	Gear,Mode Big
127	NGERH0117AWZZ	J	AC	Gear,Lift A
128	NGERH0118AWZZ	J	AB	Gear,Lift B
129	NGERH0119AWZZ	J	AF	Gear,Lift C
130	NGERH0115AWZZ	J	AC	Gear,Tray Idler
131	NGERH0106AWZZ	J	AC	Gear,MT Idler,F
132	NGERH0120AWZZ	J	AB	Gear,STB A
133	NSFTT0055AWM1	J	AH	STB Gear Ass'y
133- 1	NGERH0122AWZZ	J	J	Gear,STB C
133- 2	NSFTT0055AWFD	J	J	Shaft,STB Gear
133- 3	NGERH0123AWZZ	J	J	Gear,STB D

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
134	NGERH0108AWZZ	J	AK	Gear,Tray Big
135	NGERH0109AWZZ	J	AB	Gear,Tray A
136	NGERH0110AWZZ	J	AC	Gear,Tray B
137	NGERH0103AWZZ	J	AB	Gear,MT Idler,C
138	NGERH0102AWZZ	J	AC	Gear,MT Idler,B
139	NGERH0105AWZZ	J	AB	Gear,MT Idler,E
140	NGERH0104AWZZ	J	AB	Gear,MT Idler,D
141	NGERH0101AWZZ	J	AD	Gear,MT Idler,A
142	NGERH0114AWZZ	J	AB	Gear,Tray C
143	NGERH0107AWZZ	J	AC	Gear,Tray Drive,F
144	NGERH0112AWZZ	J	AF	Gear,Tray Joint,F
145	MLEVP0097AWZZ	J	AB	Lever,Left
146	NSFTT0056AWFD	J	AC	Shaft,Lift Lever
147	LHLDZ1270AWZZ	J	AH	Holder,STB
148	PMAGF0001AWZZ	J	AF	Magnet
149	LHLDM1011AWZZ	J	AD	STB
150	92LNBAND1318A	J	AA	Nylon Band,80mm
151	QCNCW025DAWZZ	J	AB	Holder,Flat Wire,4Pin
152	QCNCW025HAWZZ	J	AC	Holder,Flat Wire,8Pin
801	XBPSD26P04000	J	AA	Screw,ø2.6×4mm
802	XEBSD20P07000	J	AB	Screw,ø2×7mm
803	XEBSD20P10000	J	AA	Screw,ø2×10mm
804	XHBSD20B05000	J	J	Screw,ø2×5mm
805	LX-EZ0005AWFD	J	AA	Screw,ø2.6×10mm
806	LX-EZ0026AWFD	J	J	Screw,ø2×9mm
807	LX-JZ0105AFFN	J	AA	Screw,ø1.7×5mm
808	XEBSD30P10000	J	AA	Screw,ø3×10mm
MOB1	92LMTR3435DASY	J	AM	Main Cam Motor Ass'y
MOB2	92LMTR3435DASY	J	AM	Tray Motor Ass'y

CABINET PARTS

201	92LCAB3442AASY	J	J	Front Panel Ass'y
201- 1	—	—	—	Front Panel (Not Replacement Item)
201- 2	GCOVA1314AWSA	J	AF	Cover,Changer Door Panel, Bottom
201- 3	GCOVA1329AWSA	J	J	Cover,Cassette Holder
201- 4	GDORF0080AWSA	J	AG	Cassette Holder
201- 5	GDORF0081AWSA	J	AD	Door,Changer 1
201- 6	GDORF0084AWSA	J	AD	Door,Changer 2
201- 7	GDORF0085AWSA	J	AD	Door,Changer 3
201- 8	GDORF0086AWSA	J	AD	Door,Changer 4
201- 9	GDORF0087AWSA	J	AD	Door,Changer 5
201-10	GDORF0088AWSA	J	AD	Door,Changer 6
201-11	HDECQ0597AWSA	J	AK	Panel,Changer Door
201-12	HDECQ0633AWSA	J	AM	Decoration Plate,Center Window
201-13	MLOK0005AWZZ	J	AC	Cassette Lock
201-14	JKNBZ0724AWSA	J	AF	Button,Power
201-15	JKNBZ0726AWSA	J	AG	Button,CD Play
201-16	JKNBZ0735AWSA	J	AF	Button,Control Eject
201-17	JKNBZ0741AWSA	J	AK	Button,CD Eject
201-18	LANGK0210AWFW	J	AB	Bracket,Headphones Support
201-19	LHLD01005AWZZ	J	AC	Holder,Soft,Left
201-20	LHLD01006AWZZ	J	AC	Holder,Soft,Right
201-21	LHLDZ1271AWSA	J	AD	Holder,Changer Door
201-22	LHLDZ1276AWZZ	J	AC	Holder,Cassette Lock
201-23	MLIFP0008AWZZ	J	AD	Damper
201-24	MSPRC0029AWFJ	J	AB	Spring,Cassette Lock
201-25	MSPRD0140AWFJ	J	AC	Spring,Cassette Up
201-26	MSPRD0141AWFJ	J	AB	Spring,Changer Door
201-27	PCOVA1323AWSA	J	AB	Cover,Remote Sensor
201-28	PCUSG0053AWSA	J	AB	Cushion,Center Panel
201-29	LHLDZ1272AWZZ	J	AC	Holder,Switch
201-30	PSHEM0010AWZZ	J	J	Shield Sheet,Tape Head
201-31	PSHEM0009AWZZ	J	J	Earth Sheet,Display PWB
201-32	MSPRZ0010AWFJ	J	J	Spring,Display PWB
201-33	JKNBK0080AWSA	J	AG	Knob,Jog
201-34	PCOVU1004AWZZ	J	AC	Cover,LCD
201-35	LHLDZ1265AWZZ	J	AC	Holder,LED,A
201-36	LHLDZ1266AWZZ	J	AC	Holder,LED,B
201-37	PSHEP0041AWZZ	J	AG	Sheet,LCD
201-38	LHLDZ1269AWZZ	J	AD	Holder,LCD
201-39	HDECQ0606AWSA	J	AN	Decoration Plate,MD Door
201-40	GDORF0064AWSH	J	AF	MD Door
201-41	MSPRT0022AWZZ	J	AB	Spring,MD Door
201-43	JKNBZ0733AWSA	J	AF	Button,MD Eject
201-44	PSPAS0016AWZZ	J	J	Spacer,MD Unit Bracket
201-46	PSHEP0050AWSA	J	J	Filter
201-47	PSPAZ0024AWZZ	J	AC	Spacer,LCD
202	92LCAB3435BASY	J	J	Side Panel Ass'y,Left
202- 1	GITAS0077AWSA	J	AP	Side Panel,Left
202- 2	PCUSG0022AWZZ	J	AB	Cushion,Leg

CD-MD3000H/CD-MD3000W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION	NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
203	92LCAB3435CASY	J		Side Panel Ass'y,Right	△ 239	QACCB0009AW00	J	AL	AC Power Supply Cord [CD-MD3000W]
203- 1	GITAS0078AWSA	J	AP	Side Panel,Right	△ 239	QACCB0011AW00	J	AS	AC Power Supply Cord [CD-MD3000H]
203- 2	PCUSG0022AWZZ	J	AB	Cushion,Leg	△ 239	QACCE0008AW00	J	AG	AC Power Supply Cord [CD-MD3000W]
204	GCAB-1188AWSA	J	AN	Top Cabinet	△ 239	QACCE0010AW00	J	AK	AC Power Supply Cord [CD-MD3000H]
205	92LPNL3442AASY	J		Control Panel Ass'y	△ 239	QACCL0005AW00	J	AN	AC Power Supply Cord [CD-MD3000W]
205- 1	GCOVA1311AWSA	J	AN	Control Panel A	△ 239	QACCE0010AW00	J	AK	AC Power Supply Cord [CD-MD3000H]
205- 2	GCOVA1312AWSA	J	AB	Indicator A,Button	△ 239	QACCL0005AW00	J	AN	AC Power Supply Cord [CD-MD3000W]
205- 3	GCOVA1313AWSA	J	AB	Indicator B,Button	△ 240	QFSDH0001AWZZ	J	AB	Holder,Fuse
205- 4	GDORF0093AWSA	J	AN	Control Panel B	241	92LCSRP1431C	J	AA	Spring,Ring
205- 5	HDECQ0601AWSA	J	AM	Decoration Plate,Outer Window	242	PSLDM3076AWFW	J		Shield Plate,Phone
205- 6	HDECQ0602AWSA	J	AG	Outer Window	△ 243	92LLUG1746A	J	AA	Lug,Terminal
205- 7	HDECQ0603AWSA	J	AG	Inner Window	244	TSPC-0772AWZZ	J		Label,Specifications [CD-MD3000W for Thailand Only]
205- 8	HDECQ0604AWSA	J	AG	Ring,Jog Knob	245	TCAUS0028AWZZ	J	AB	Caution Label,Class 3B
205- 9	JKNBZ0737AWSA	J	AF	Button,Function	246	92LCAUT1706A1	J	AC	Label,Class 3
205-10	JKNBZ0734AWSA	J	AH	Button,Control	247	92LLABL1204C	J	AA	Label,Made In Malaysia [CD-MD3000W Only]
205-11	JKNBZ0730AWSA	J	AG	Button,Play Mode	248	PCOVZ1016AWZZ	J		Cover,AC Protection
205-12	JKNBZ0738AWSA	J	AG	Button,Menu	249	92LPANEL713A	J	AB	Panel,Made In Malaysia [CD-MD3000W Only]
205-13	JKNBZ0732AWSA	J	AE	Button,Enter	250	KMECB0016AWZZ	J	BD	Tape Mechanism Ass'y
205-14	MSPRD0142AWFJ	J	AD	Spring,Control Panel	250- 1	92PF513-853	J		Head Plate Block
205-15	LHLDZ1274AWZZ	J	AC	Holder,LED E	250- 2	92PF525-332	J		Motor with Pulley [Tape]
205-16	LHLDZ1268AWZZ	J	AC	Holder,LED,D	250- 3	92PF567-647	J		Tape Mechanism PWB Ass'y
206	GEAR3435AASY1	J		Gear Ass'y	250- 4	92PFF19U-	J		Belt,Main
206- 1	LHLDZ1261AWZZ	J	AE	Gear Box A	250- 5	92PF514-133	J		Pinch Roller,Right
206- 2	LHLDZ1262AWZZ	J	AC	Gear Box B	250- 6	92PF514-134	J		Pinch Roller,Left
206- 3	PSPA20023AWZZ	J	AC	Spacer,Warm Gear	250- 7	92PFF19S-	J		Belt,FF/REW
206- 4	NGERH0097AWZZ	J	AC	Gear,Reduc.A	250- 8	92PFD58M-	J		Gear,Cam
206- 5	NGERH0124AWZZ	J	AF	Gear,Reduc.B	250- 9	92PF765-286	J		Solenoid
206- 6	NGERW0013AWZZ	J	AC	Gear,Warm	601	LX-BZ0880AFZZ	J	AC	Screw,ø2×2.2mm
206- 7	NGERW0014AWZZ	J	AF	Gear,Warm Wheel	602	LX-BZ2222AXZZ	J	AB	Screw,Special
207	GITAR0646AWSA	J	AP	Rear Panel [CD-MD3000H Except for U.K.] [Serial No.-010xxxxx]	603	LX-EZ0028AWFN	J	AC	Screw,ø2.6×12mm
207	GITAR0647AWSA	J		Rear Panel [CD-MD3000H for U.K.] [Serial No.-010xxxxx]	604	LX-HZ0082AFZZ	J	AA	Screw,ø4×8mm
207	GITAR0648AWSA	J		Rear Panel [CD-MD3000W] [Serial No.-010xxxxx]	605	LX-JZ0010AFFD	J	AA	Screw,ø3×10mm
207	GITAR0689AWSA	J		Rear Panel [CD-MD3000H Except for U.K.] [Serial No.011xxxxx~]	606	XBBSD20P05000	J	AA	Screw,ø2×5mm
207	GITAR0690AWSA	J		Rear Panel [CD-MD3000H for U.K.] [Serial No.011xxxxx~]	607	XEBSD26P10000	J	AA	Screw,ø2.6×10mm
207	GITAR0691AWSA	J		Rear Panel [CD-MD3000W] [Serial No.011xxxxx~]	608	XEBSD30P10000	J	AA	Screw,ø3×10mm
208	HDECQ0636AWSA	J	AP	Decoration Plate,Display Window [CD-MD3000H]	609	XEBSD30P14000	J	AA	Screw,ø3×14mm
208	HDECQ0637AWSA	J		Decoration Plate,Display Window [CD-MD3000W]	610	XEBSD30P20000	J	AA	Screw,ø3×20mm
209	LANGK0197AWFW	J	AG	Bracket,Center Support	611	XESSD26P12000	J	AB	Screw,ø2.6×12mm
210	LANGK0253AWFW	J		Bracket,Fan Motor Support	612	XESSD30P10000	J	AA	Screw,ø3×10mm
211	LANGK0199AWFW	J	AF	Bracket,Heat Sink Support [Serial No.-010xxxxx]	613	XESSN26P12000	J		Screw,ø2.6×12mm
211	LANGK0258AWFW	J		Bracket,Heat Sink Support [Serial No.011xxxxx~]	614	XJBSD30P08000	J	AA	Screw,ø3×8mm
212	LANGK0200AWFW	J	AE	Bracket,PWB Support	615	XJBSD30P10000	J	AA	Screw,ø3×10mm
213	LANGK0204AWFW	J	AF	Bracket,MD Support,Left	616	XJBSD30P14000	J	AA	Screw,ø3×14mm
214	LANGK0205AWFW	J	AF	Bracket,MD Support,Right	617	XJBSE30P10000	J	AA	Screw,ø3×10mm
215	LANGT0042AWFW	J	AC	Bracket,Power PWB/Main PWB	618	XJBSE30P16000	J	AA	Screw,ø3×16mm
△ 216	LBSHC0002AWZZ	J	AD	Bushing,AC Power Supply Cord	619	XJSSD30P10000	J	AA	Screw,ø3×10mm
217	LCHSM0105AWFW	J	AW	Main Chassis [CD-MD3000H] [Serial No.-010xxxxx]	620	XWHS32-10130	J	AA	Washer,ø3.2×ø13×1.0mm
217	LCHSM0126AWFW	J	AW	Main Chassis [CD-MD3000W]	621	XBPSD30P06KS0	J	AA	Screw,ø3×6mm
217	LCHSM0126AWFW	J	AW	Main Chassis [CD-MD3000H] [Serial No.011xxxxx~]	622	LX-JZ0022AFFD	J	AA	Screw,ø3×10mm
218	LCHSZ0017AWFW	J	AN	Chassis,Bottom	623	XHBSD30P06000	J	AA	Screw,ø3×6mm
219	LHLDK9001AW00	J	AB	Poly Core Tie	ACCESSORIES/PACKING PARTS (CD-MD3000H)				
220	QCNWN1730AWZZ	J		Lead Wire with Lug	SPAKC1073AWZZ	J	AY		Packing Case [Except for U.K.]
△ 222	92LRDAT1468B	J	AE	Heat Sink,Sub C	TINSZ0609AWZZ	J	AP		Operation Manual [Except for U.K.]
223	PREFL0006AWSA	J	AG	Illumination Plate	TLABZ0607AWZZ	J	AB		Label,GEA,Unit [Except for U.K.]
224	LANGK0255AWFW	J		Bracket,Fan Motor Support [CD-MD3000W Only]	TLABZ0822AWZZ	J			Label,Feature [Except for U.K.]
225	MSPRD0108AWFJ	J	AC	Spring,Fan Motor	1	QANTL0005AWZZ	J	AG	AM Loop Antenna
226	NBRGC0003AWZZ	J	AC	Bearing Metal	2	SPAKA0268AWZZ	J		Packing Add.,Front/Rear
227	NFANP0001AWZZ	J	AD	Rotary Fan	3	SPAKC1083AWZZ	J		Packing Case [For U.K.]
228	PCUSG0008AWZZ	J	AB	Cushion,Gum	4	SSAKA0007AWZZ	J	AB	Polyethylene Bag,Accessories
229	PCUSG0022AWZZ	J	AB	Cushion,Leg	5	SSAKH0038AWZZ	J	AE	Polyethylene Bag,Unit
△ 230	PRDAR0163AWFW	J	AP	Heat Sink,Main	6	TGAN-3170UMZZ	J	AE	Warranty Card
△ 231	PRDAR0164AWFW	J	AS	Heat Sink,Sub A	7	TINSE0328AWZZ	J	AF	Operation Manual [For U.K.]
△ 232	PRDAR0165AWFW	J	AH	Heat Sink,Sub B	8	TINSE0329AWZZ	J	AC	Quick Guide [For U.K.Only]
233	92LNBAND1318A	J	AA	Nylon Band,80mm	9	TLABN0112AWZZ	J	AA	Label,Serial Number
234	92LCAUT1706B	J	AA	Label,Laser	10	TLABZ0605AWZZ	J	AB	Label,Saving Energy
236	PSLDM3075AWFW	J		Shield Plate,Power PWB	11	TLABZ0823AWZZ	J		Label,Feature,CD Changer [For U.K. Only]
238	PSPAS0003AWZZ	J	AC	Spacer,Fan Motor Support Bracket	12	TLABZ0835AWZZ	J		Label,Feature,Unit
△ 239	QACCA0003AW00	J	AL	AC Power Supply Cord [CD-MD3000W]	13	92LFANT1535A	J	AF	FM Antenna
					14	RRMCG0244AWSA	J	AT	Remote Control
					14- 1	GFTAB1030AWSA	J		Battery Lid,Remote Control
					15	TLABE0447AWZZ	J		Label,Bar Code

CD-MD3000H/CD-MD3000W

NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION
ACCESSORIES/PACKING PARTS (CD-MD3000W)			
△	QANTL0009AWZZ	J AH	AM Loop Antenna
△	QPLGA0003AWZZ	J AF	Adaptor, AC Plug [CD-MD3000W Only]
	QPLGA0004AWZZ	J AF	Adaptor, AC Plug [CD-MD3000W Only]
	SPAKA0268AWZZ	J	Packing Add., Front/Rear
	SPAKC1074AWZZ	J	Packing Case
	SSAKA0007AWZZ	J AB	Polyethylene Bag, Accessories
	SSAKH0038AWZZ	J AE	Polyethylene Bag, Unit
	TGANE0011AW56	J	Warranty Card
	TINSZ0610AWZZ	J	Operation Manual
	TLABE0448AWZZ	J	Label, Bar Code
	TLABE0469AWZZ	J	Label, Bar Code
	TLABG0002AWZZ	J AB	Label, Hong Kong [CD-MD3000W Only]
	TLABN0112AWZZ	J AA	Label, Serial Number, Packing Case
	TLABS0276AWZZ	J	Label, Safety [For Hong Kong Only]
	TLABS0290AWZZ	J	Label, CPA [CD-MD3000W Only]
	TLABZ0620AWZZ	J AB	Label, Saving Energy, Unit
	TLABZ0821AWZZ	J	Label, Feature [Except for Australia/New Zealand]
	TLABZ0823AWZZ	J	Label, Feature, CD Changer [For Australia/New Zealand]
	TLABZ0835AWZZ	J	Label, Feature, Unit
	TLSTS0016AWZZ	J	SS List [CD-MD3000W Only]
	92LBAG1770A	J AB	Polyethylene Bag, AC Power Supply Cord [CD-MD3000W Only]
	92LBAG760C	J AA	Polyethylene Bag, AC Plug Adaptor [CD-MD3000W Only]
	92LFANT1746A	J AD	FM Antenna
	92LGCARD1266E1	J AC	Guarantee Card [CD-MD3000W Only]
	92LLABL1507B	J AA	Label, Made In Malaysia, Packing Case [CD-MD3000W Only]
	RRMCG0250AWSA	J	Remote Control
	GFTAB1030AWSA	J	Battery Lid, Remote Control

P.W.B. ASSEMBLY (Not Replacement Item)

PWB-A1,2	92LPWB3442MANS	J —	Main/Relay [CD-MD3000H]
PWB-A1,2	92LPWB3443MANS	J —	Main/Relay [CD-MD3000W]
PWB-B1~10	92LPWB3442DPLS	J —	Display/LED A/LED B/CD Switch/Control/Jog/Motor/Switch/Headphones/MD Switch (Combined Ass'y)
PWB-C	92LPWB3442CDUS	J —	CD [CD-MD3000H]
PWB-C	92LPWB3443CDUS	J —	CD [CD-MD3000W]
PWB-D1~3	92LPWB3442PWRS	J —	Power/Sub Trans/Speaker (Combined Ass'y) [CD-MD3000H]
PWB-D1~3	92LPWB3443PWRS	J —	Power/Sub Trans/Speaker (Combined Ass'y) [CD-MD3000W]
PWB-E	QPWBF0027AWZZ	J AD	CD Motor (PWB Only)
PWB-F	QPWBF0644AWZZ	J AD	Tray Switch (PWB Only)
PWB-G	QPWBF0645AWZZ	J AC	Cam Switch (PWB Only)
PWB-H	92PF567-647	J —	Tape Mechanism
PWB-J	92LPWB3272MDSS	J —	MD Main
PWB-K1,2	QPWBF0554AWZZ	J AD	MD Mechanism Switch/MD Loading Motor (PWB Only)

OTHER SERVICE PARTS

QCNWK0108AFZZ	J AL	Extension Flat Cable (28Pin)
QCNWK0109AFZZ	J AH	Extension Flat Cable (5Pin)
QCNWK0129AFZZ	J AG	Extension Connector (2Pin)
QCNWK0130AFZZ	J AP	Extension Flat Cable (6Pin)
QCNWN6931AFZZ	J AN	Extension Flat Cable (33Pin)
RRCDT0101AFZZ	J CB	Test Disc, High Reflection
RRCDT0103AFZZ	J BK	Head Adjusting Transparent Disc
RUNTK0532AFZZ	J BK	Extension PWB for Service
UDSKA0004AFZZ	J AZ	CD Pickup Lens Cleaner Disc
88GMMD-213AS	J BT	Low Reflection Disc, Pre-Adjustment Mini Disc (TEAC Test MD)
88GMMD-318	J BF	Low Reflection Disc, Pre-Adjustment Mini Disc (TEAC Test MD)

NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION
CP-RW5000H/CP-RW5000W			
SPEAKER BOX PARTS			
701	92L0517-01C	J	Speaker Box Ass'y
702	92LJ1934A	J AL	Front Panel Ass'y
703	92LJ1933A	J AL	Net Frame Ass'y
704	92LJ2773TA	J AH	Ring, Tweeter
705	92LJ2772WA	J AG	Ring, Woofer
706	92LJ9802	J AF	Catching Holder, Top
707	92LJ9802BK	J AC	Catching Holder, Bottom
708	92LJ2776WB	J AD	Panel, Sub Woofer
709	92LE5870	J AN	Speaker Cord Ass'y, Woofer with Capacitor
710	92LE3192RBA	J AF	Speaker Cord Ass'y, Sub Woofer
711	92LJ9763B	J AC	Cushion, Speaker Cord
712	92LJ3093L	J	Speaker Terminal, Woofer
713	92LJ3093C	J AK	Speaker Terminal, Sub Woofer
714	92LP5890	J	Label, Specifications [CP-RW5000H]
714	92LP5891	J	Label, Specifications [CP-RW5000W]
715	92LF1078	J AB	Screw, ø3×10mm
716	92LF1080	J AB	Screw, ø3×10mm
717	92LF166540ASH	J AK	Screw, ø4×16mm
718	92LF2017A	J AD	Screw, ø4×20mm
719	92LL9763B	J	Felt
720	92LJ3041B	J	Felt
SP601,602	RSPA10002AW6W	J AU	Woofer
SP603,604	RSPA00002AW6T	J AU	Tweeter
SP605,606	VSP0013WB476A	J AY	Sub Woofer

ACCESSORIES/PACKING PARTS

1	92LN1892B	J	Packing Add., Bottom, Speaker
2	92LN1892T	J	Packing Add., Top, Speaker
3	92LT7809	J AM	Speaker Cord Ass'y
3-1	92LD2576BBK	J AC	Speaker Wire for Main Terminals
3-2	92LD2583RB	J AC	Speaker Wire for Sub Woofer Terminals
4	92LV1054C	J	Polyethylene Bag, Speaker
5	92LV5840	J	Center Pad, Speaker

CD-MD3000H/CD-MD3000W

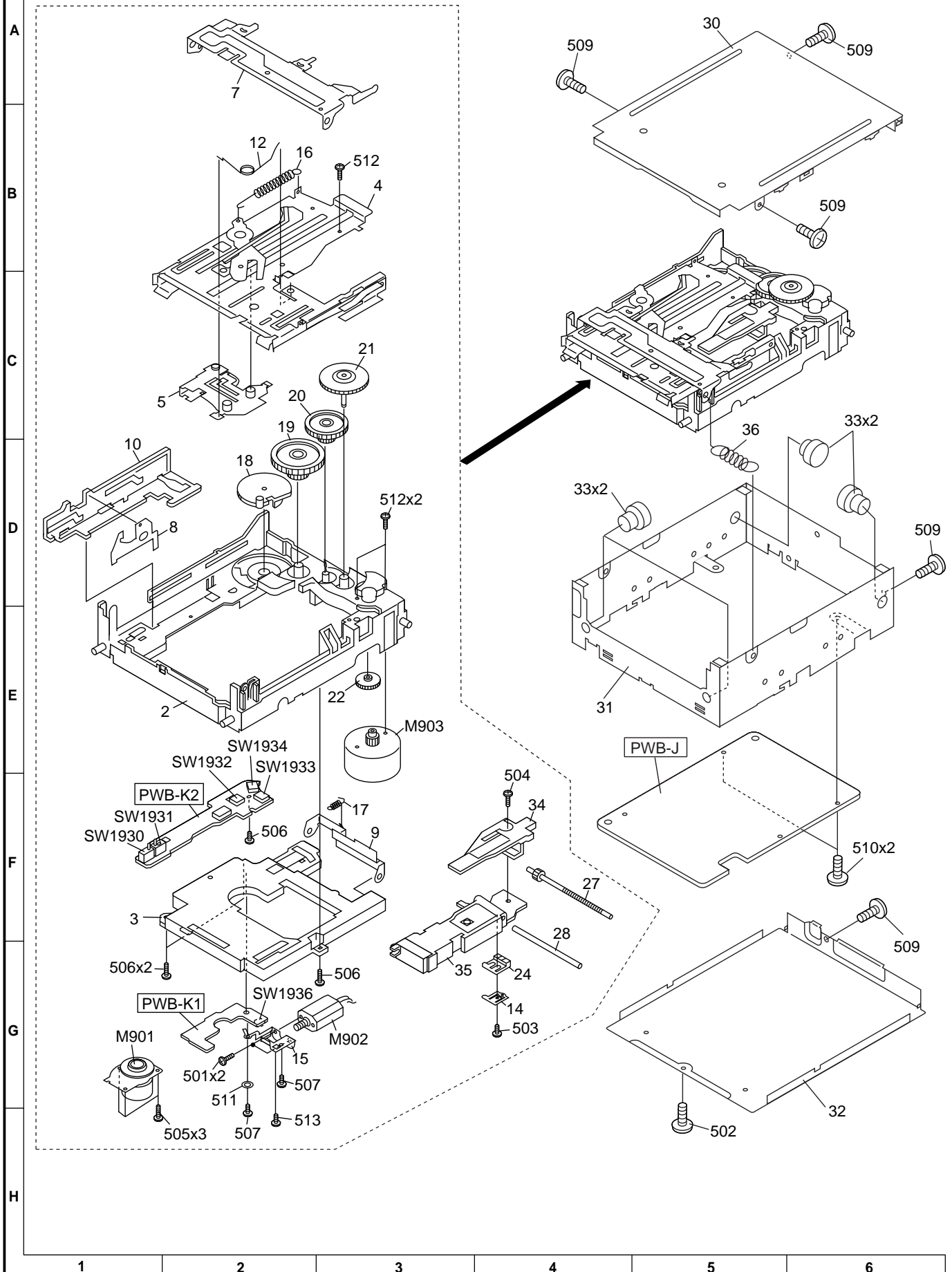


Figure 12 MD MECHANISM EXPLODED VIEW

CD-MD3000H/CD-MD3000W

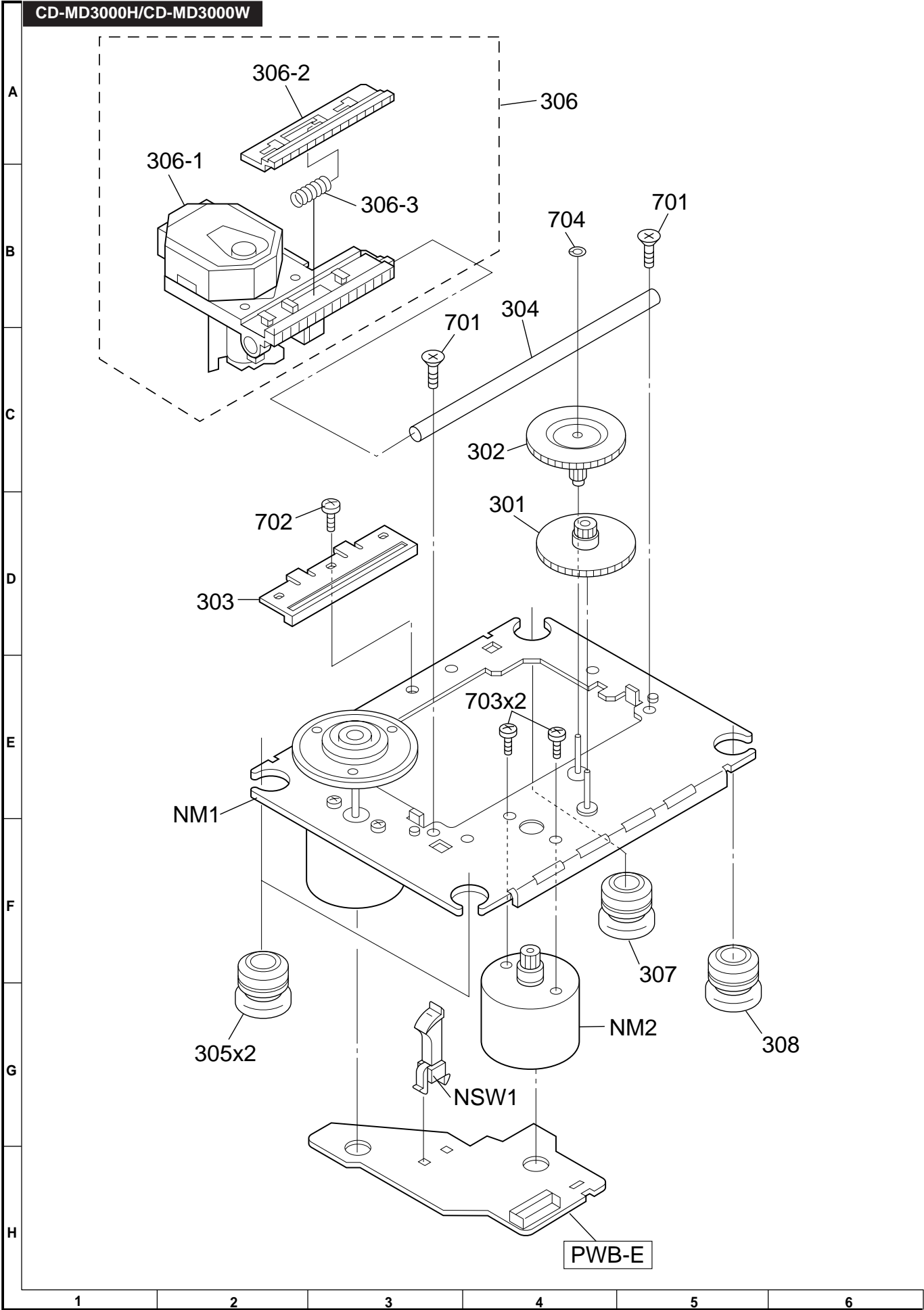


Figure 13 CD MECHANISM EXPLODED VIEW

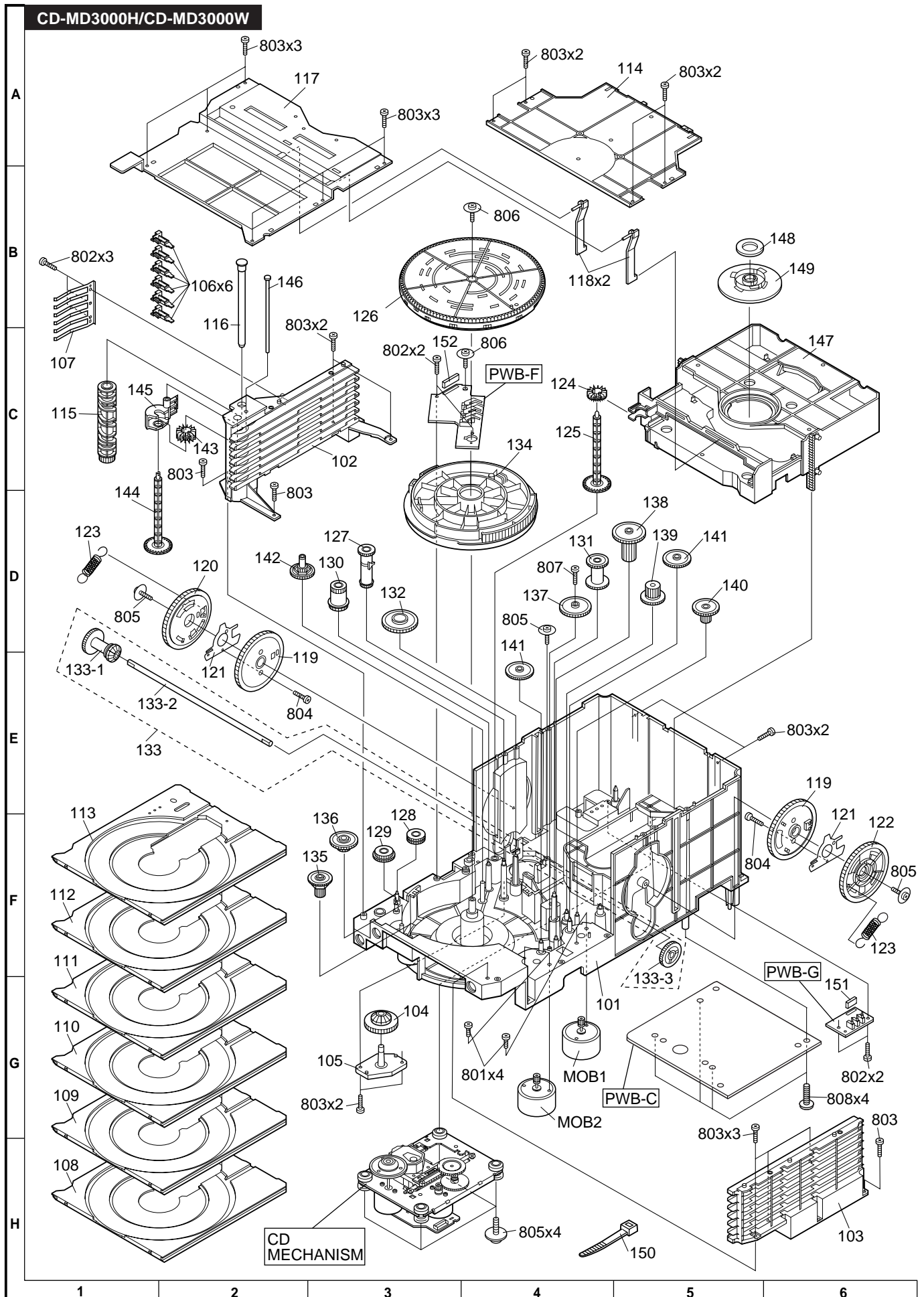


Figure 14 CD CHANGER MECHANISM EXPLODED VIEW

CD-MD3000H/CD-MD3000W





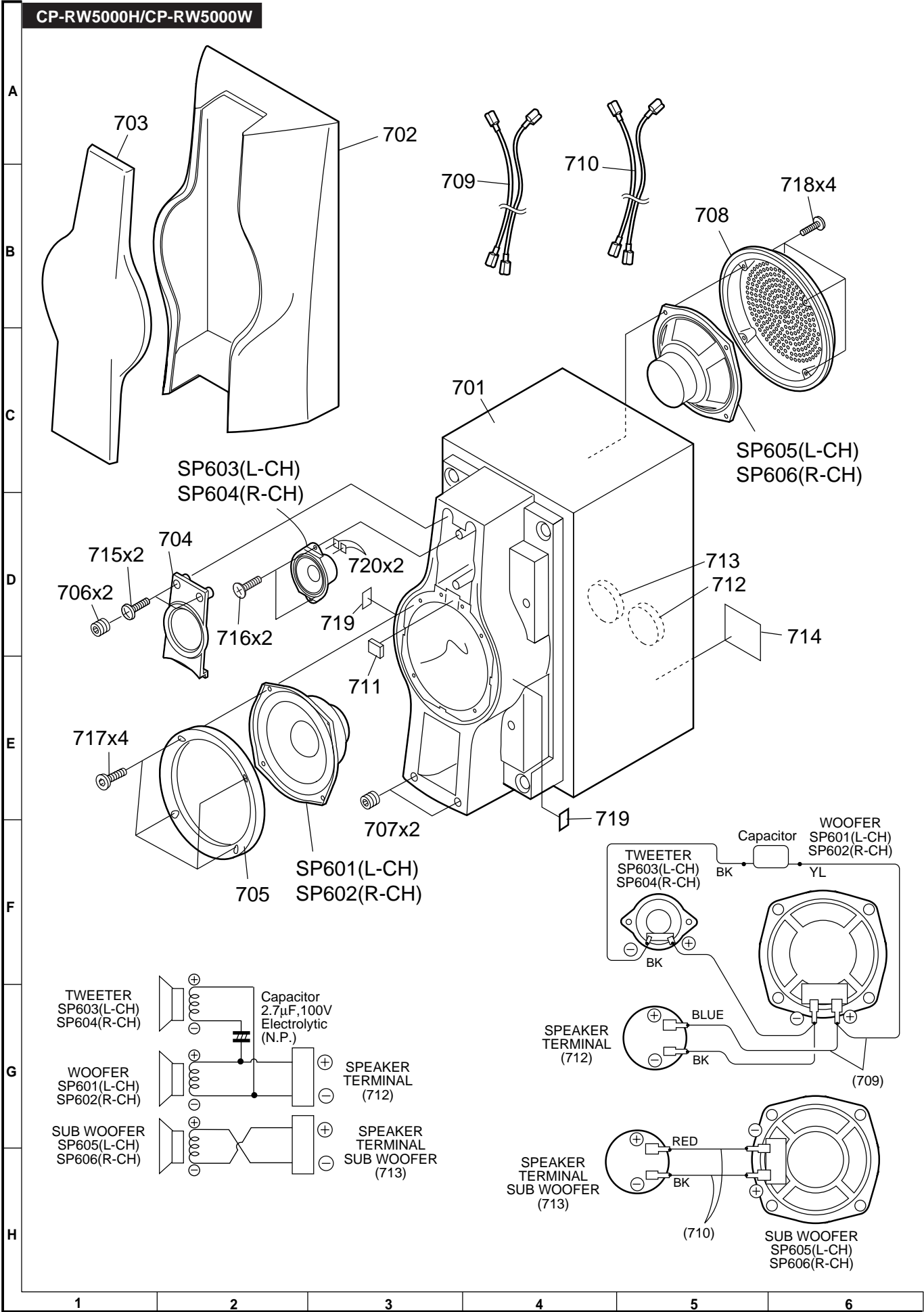


Figure 17 SPEAKER EXPLODED VIEW

PACKING METHOD (CD-MD3000H FOR U.K. ONLY)

CD-MD3000H

1. AM Loop Antenna
2. Packing Add., Front/Rear
3. Packing Case
4. Polyethylene Bag, Accessories
5. Polyethylene Bag, Unit
6. Warranty Card
7. Operation Manual
8. Quick Guide
9. Label, Serial Number
10. Label, Saving Energy
11. Label, Feature, CD Changer
12. Label, Feature, Unit
13. FM Antenna
14. Remote Control
15. Label, Bar Code
16. Battery

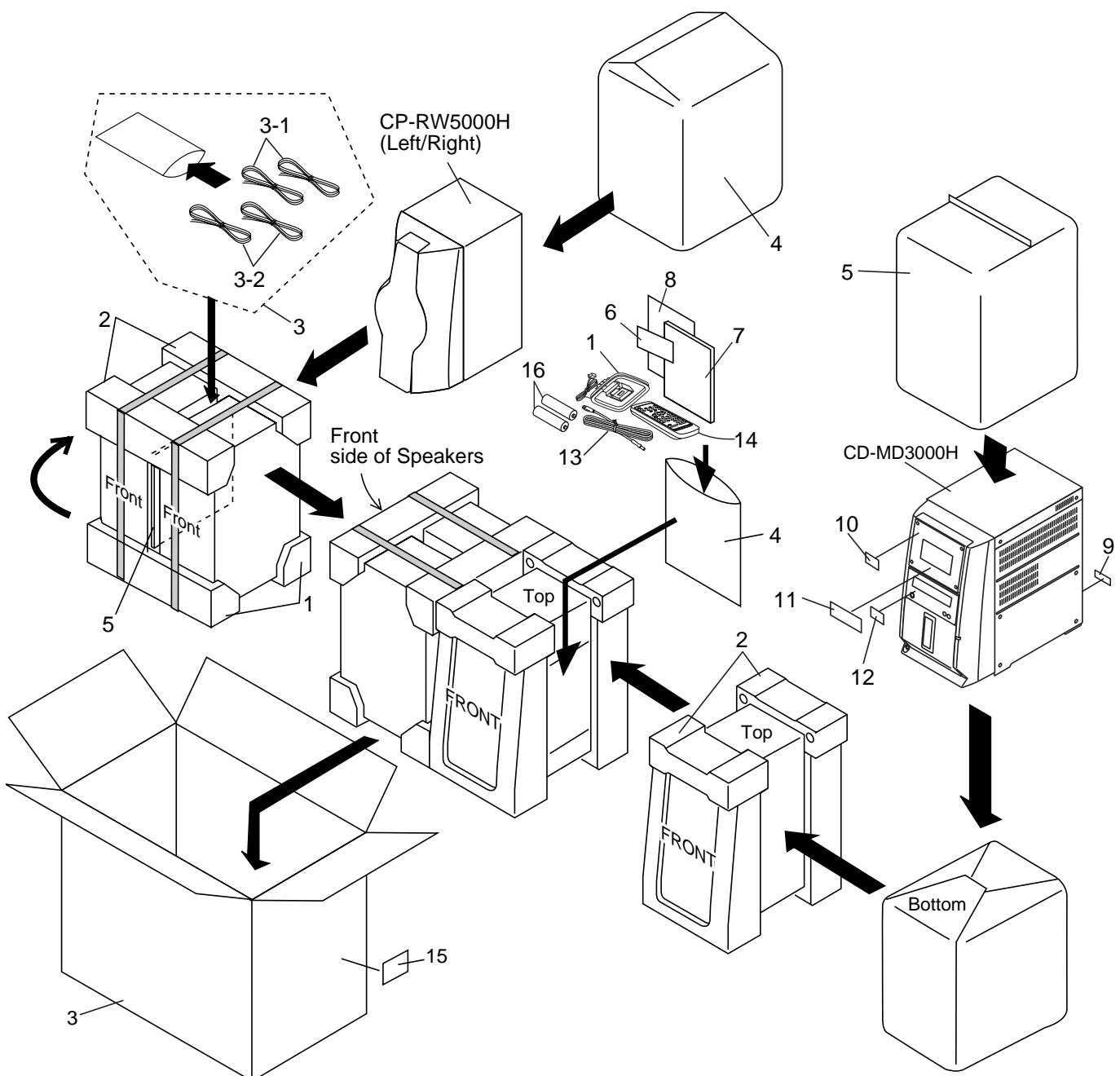
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 SPAKA0268AWZZ
 SPAKC1083AWZZ
 SSAKA0007AWZZ
 SSAKH0038AWZZ
 TGAN-3170UMZZ
 TiNSE0328AWZZ
 TiNSE0329AWZZ
 TLABN0112AWZZ
 TLABZ0605AWZZ
 TLABZ0823AWZZ
 TLABZ0835AWZZ
 92LFANT1535A
 RRMCG0244AWSA
 TLABE0447AWZZ

CP-RW5000H

- | | |
|--|-------------|
| 1. Packing Add., Bottom, Speaker | 92LN1892B |
| 2. Packing Add., Top, Speaker | 92LN1892T |
| 3. Speaker Cord Ass'y | 92LT7809 |
| 3-1. Speaker Wire for Main Terminals | 92LD2576BBK |
| 3-2. Speaker Wire for Sub Woofer Terminals | 92LD2583RB |
| 4. Polyethylene Bag, Speaker | 92LV1054C |
| 5. Center Pad, Speaker | 92LV5840 |

Setting position of switches and knobs

Tape Mechanism	STOP
Cassette Holder	CLOSE
Control Panel	CLOSE



CD-MD3000H/CD-MD3000W

— MEMO —

— MEMO —



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